

## **The June Webster Saga – Part I**

### **An Unlikely Outcome – Chapter 1**

Foreword: The premise of this story is that later this decade, Islamic Jihadists take advantage of the emerging avian flu pandemic and use it as an opportunity to spread an even more virulent bioweapon in Europe and the US. In a 3-part article in the Washington Times there is a good discussion by a conservative about the dangers associated with, "The threat of the radical Islamists taking over Europe is every bit as great to the United States as was the threat of the Nazis taking over Europe in the 1940s." If you consider that the Jihadists don't seem to care who they kill, even their own people, the story is somewhat believable.

GENEVA, Switzerland (AP) – A deadly new global pandemic of human influenza is inevitable and suffering will be "incalculable" unless the world is ready, the chief of the UN health agency said Monday. The World Bank put the possible economic cost at a minimum of \$800 billion.

"We have been experiencing a relentless spread of avian flu" among migratory birds and domestic poultry, Lee Jong-wook, director-general of the World Health Organization told a meeting of 600 health experts and planners, the first attempt to devise a global strategy in case the bird flu virus changes to transmit easily among humans.

Lee stressed that a human flu pandemic has yet to begin anywhere in the world.

"However, the signs are clear that is coming," he said, noting that a changed avian flu virus caused the deadly "Spanish" flu pandemic that killed tens of millions of people in 1918-1919.

Already the virulent H5N1 strain of avian flu, which appeared in Hong Kong in 1997, is killing birds in 15 countries of Europe and Asia, he said.

"It is only a matter of time before an avian flu virus – most likely H5N1 – acquires the ability to be transmitted from human to human, sparking the outbreak of human pandemic influenza," Lee said.

A senior World Bank economist told the meeting that a global human flu pandemic could cause world gross domestic product to drop by 2 percent or more. That would amount to about \$800 billion (675 billion euros) over the course of a year, said Milan Brahmbhatt, the World Bank's lead economist for the East Asia and Pacific region, basing estimates on a comparison with the economic costs of the SARS virus.

A lot of the cost could be caused by "panic and disruption," said Brahmbhatt, referring to what happened during the SARS outbreak in 2003, when most of the economic impact was caused by people trying to avoid infection.

During the second quarter of 2003, the outbreak of Severe Acute Respiratory Syndrome caused East Asia's GDP to drop by 2 percent, Brahmbhatt said during the opening session of the three-day meeting of scientists, health experts and government and business representatives.

Most of the losses were caused by people avoiding travel, staying home from work and going out less to eat and shop, said Brahmbhatt.

About 60 percent of countries have a pandemic preparedness plan, but in most cases it is only a piece of paper, and those plans "need to move to exercise and rehearsal," said Mike Ryan, WHO's outbreak response director.

Although bird flu has recurred over the years, scientists have been watching H5N1 since its impact on humans started to be noticed. In early 2004 officials announced that three people – an adult and two children – had died from the disease in Vietnam.

Since then more than 120 people, most of who were in close contact with poultry, have come down with the disease in Vietnam, Cambodia, Thailand and Indonesia, WHO says. More than half of the people infected have died.

Since then more than 150 million chickens and other poultry have died or been culled, but that has not halted the spread of the disease to birds in central Asia, Russia and Eastern Europe.

Around the world governments have made plans for the human influenza that would result if the virus mutates so that people could easily infect each other. Developing a vaccine is hampered because it is unknown exactly what form the deadly virus would take.

The result has left many governments stocking up on antiviral drugs that work against regular flu and are believed to be the best immediate weapon to confront a pandemic until a vaccine can be produced.

Preparations are also being made to protect domestic poultry flocks by requiring that they be kept under cover or vaccinated.

"For the first time in human history, we have a chance to prepare ourselves for a pandemic before it arrives," Dr. Margaret Chan, WHO's top official in charge of monitoring avian influenza. "It is incumbent upon the global community to act now."

The world has seen four flu pandemics since 1890, the last one in the late 1960s. An ordinary flu epidemic kills thousands of people, but pandemics can be much worse. The pandemic of 1918-19 killed up to 40 million or 50 million people, WHO officials have said.

Dr. David Nabarro, a senior WHO expert appointed by UN Secretary-General Kofi Annan in September to coordinate the global response, said, "Each Country needs to in-

crease its capacity to do what is expected of them."

Nabarro has said a new flu pandemic could kill between 5 million and 150 million people, but WHO's flu spokesman Dick Thompson said the agency considers a maximum death toll of 7.4 million a more reasoned forecast.

Scientists have made all sorts of predictions, ranging from less than 2 million to 360 million.

Besides scientific concerns, one major element to be discussed will be how to pay for the preparations on a Country, regional and global level.

The cost could be enormous. Last week US President George W. Bush proposed that the United States spend \$7.1 billion to prepare for a flu pandemic.

"Did you see the story on the CNN website?"

"I didn't look, what did it say?"

"It said that a H5N1 pandemic was a question of when, not if, honey. We should get flu shots."

"Do they have a vaccine available for H5N1?"

"They are testing something but I don't think it's available. Still, even a regular flu shot couldn't do anything but help to build our immunities."

"I'm not so worried about a pandemic, June, we can isolate here on the farm. However, if a lot of people get sick, the Country could be in trouble. All the basic services that people take for granted could be impaired. For example trash pickup, water and possibly electricity. I read on CNN that they were considering restricting travel, so what would that mean for our fuel supplies?"

"I hadn't thought about that, Randy, but it occurred to me that the last place we'd want to go would be the doctor's office if we got sick or hurt. We should get all of our vaccinations brought up to date and we should buy a real first aid kit instead of the Band-Aids we usually keep."

"Want to sit down and make a list?"

"What kind of list?"

"We should list every possible contingency and the list the steps we'd need to overcome them."

"Fine. Let me get some paper."

"You said immunizations so put that at the top of the list. Next to that add a major trauma first aid kit. We need to get boosters for all of our childhood immunizations plus any they've started giving that we don't have."

"I don't know if they give some of those shots anymore, Randy. They don't vaccinate for smallpox."

"I have a solution to that; we'll get passports quickly and tell the doctor we're planning a trip overseas. I'll check the CDC website and see which Country requires the most immunizations, probably somewhere in Southeast Asia. We'll probably get things I haven't had since I was in the Army, like Yellow Fever, Smallpox and who knows what else? I'll shop the web for a first aid kit and we'll talk to the Doc about anything else we might need."

"Ok, what else do you to put on the list?"

"We have a good, deep well, so water won't be a problem, but fuel could be in short supply. On top of that, if we did lose electricity, we'd need some means to generate our own."

"So it's Vaccinations; First aid kit; Fuel; and, a Generator?"

"That's a start, you'd better put food near the top of the list; if we can't go to the doctor, we sure can't go to a grocery store."

"Ok, I'll add food to the list. What about some seeds for the garden?"

"Get the ones that you can use to reproduce themselves. Heirloom seeds?"

"What else?"

"Spare parts for my old Dodge pickup might be a good idea. I'll stop by the dealer and pick up a full set of parts, and then go to a parts house and get filters and get a case of oil."

"You'd better get some fuel preservative if we're going to store a lot of fuel. What kind of fuel are you going to store?"

"Number 2 diesel fuel for the truck and a larger propane tank for the generator. We won't be able to use your car, but the pickup is enough."

That simple conversation over an article on CNN became a project. Randy took the pickup in and got it tuned up. When he picked it up from the dealer, he got a full set of belts, hoses and ignition parts. He bought a new set of tires and stored them in his

basement where everything was beginning to accumulate. June laid in enough groceries to last them a full winter. They went to the federal building and applied in person for passports. Armed with the passports and information from CDC, they got all of their shots.

They shopped and found a low-hour used Onan 1,800rpm, propane fueled 30kw generator, Onan model RS30. The generator used from 1.9 to 4.2gph. They installed an underground fuel tank with a capacity of 30,000 gallons in addition to their existing 1,100 above ground tank. It and the generator were installed at the well house where the main breaker panel was located. At full power, the generator had a rated output of 125amps, more than the panel for the farm. It was a beginning, but they were just getting started. The Pri-D cost \$75 per gallon and was available in pint, quart and gallon bottles, 5-gallon pails and 55-gallons drums. They bought 1 gallon of PRI-D and 2 quarts of PRI-G because they had a 500 gallon farm tank for gasoline.

"He said we were crazy for getting all of those shots."

"Maybe we are June, but it's just a precaution. Now we're good for 10-years. I went through the contents of the trauma bag I bought on the net and I think we need to add a few things."

"Like what, for example?"

"QuikClot haemostatic sponges, one of those kits that EMP sells and a few other things."

"Prescription?"

"Some is and some isn't. We could get an automatic defibrillator, blood pressure cuff, stethoscope, blood sugar monitor and put a couple of bottles of oxygen in the basement. We can both take an EMT basic course at the Junior College. Once we had the class, we could add IV solutions and administration sets. We could even consider an oximeter. I wasn't thinking about going hog wild, but let's assume we can't get to a hospital or a doctor."

"How long is it going to take to fill the propane tank?"

"Several more months unless we come into some money we weren't planning on, it's about \$1.50 a gallon."

"It seems to me that we're forgetting something."

"What, for example?"

"A means to protect ourselves. What kind of rifle was that you were looking at in the store?"

"A Loaded model M1A rifle. It's the 7.62x51mm standard NATO .30 caliber cartridge. I didn't just look; I put both of them on layaway."

"Then you're ahead of me?"

"It occurred to me that if the pandemic hit we might have a need to defend the farm. I put 2 rifles and 2 pistols on layaway."

"What kind of pistols?"

"Springfield Armory XD .45s."

"Is that all you put on layaway?"

"Nope, 2 Winchester 9422 rifles and 2 Remington Express Combo 12-gauge shotguns. I got a 20% discount because I bought so many guns."

"If you bought guns then you'll need ammo, right?"

"Right, he ordered it for me, Federal 12-gauge tactical 00 buck and slugs plus an assortment of hunting loads. I'll get 10 bricks of .22 ammo from Wally World and order Lake City overruns from a website I found. That guy also sells 20 round magazines for the M1A rifles and if I buy 80 mags, I can get them for \$11 each."

"Planning on a war?"

"I wasn't planning on anything, June, but since we decided we were going to do the getting prepared thing, I figured we'd load up."

"Did you already sign us up for the EMT course?"

"I figured I'd better talk to you first."

"What about all of that medical equipment you were talking about?"

"Not much point in getting it until we know how to use it. I'll get 2 of the kits and several packages of the ACS sponges. I figured that we'd have the fuel tank filled and the guns paid off around the same time."

"And then?"

"We'll start buying the medical supplies. So far, the avian flu hasn't made it to the US."

"We have all but turned the basement into a bomb shelter, you know."

"If you still have that list, cross off the things we've acquired and add Survey meters, Dosimeters and Potassium Iodate. I'll shovel dirt into the basement window wells after I put up some plywood to protect the glass. The thing is June, unless we do something with the basement ceiling, it won't be much of a shelter."

"Sure it will. What are you thinking now?"

"Nuclear war?"

"Get real."

"I am, honey, if you've been following CNN, you're aware of the buildup in China. Both North Korea and Iran are pursuing their nuclear programs and estimates put the Korean nuclear arsenal at anywhere from 7 to 10 weapons. I read that Iran has been collecting and processing plutonium and may have enough for 3 bombs."

"What kind of bombs?"

"Atomic bombs, neither North Korea nor Iran have the technical expertise to build hydrogen bombs. They could probably build something on the order of the 20kT bombs we used on Japan in WW II. But I still believe that the flu would get us long before anyone attacked the US. Nobody in their right mind would try to do that. The US has about half of all of the nuclear weapons in the world."

"If that's the case, why worry?"

"The ideal target for a nuclear weapon would be an operating nuclear reactor and there are over 100 around the Country. If some terrorists managed to smuggle nukes into the US, they could sit back and wait for the pandemic to erupt and then attack the reactors."

"So how do you intend to turn the basement into a real shelter?"

"It has a 10' ceiling June. I thought maybe we could lower the ceiling with road plates supported by those adjustable metal poles and add in about 16" of some absorbent material on top. If the house held together, that would provide some protection. Ideally, we'd fill the space with concrete, but that stuff is pretty heavy."

"You'll figure it out but then what? The air will have radioactive fallout in it if something like that ever happened."

"I've been checking around and several places in the Country sell an air filter/air pump for bomb shelters. If we did go ahead and convert the basement to a shelter, we'd need some of those with blast valves."

"You'd want to put that generator down here in the basement, wouldn't you?"

"It's no big deal to move it; it only weights about 1,300 pounds. I could run a pipe from the fuel tank and hook into the panel connecting to the well house. We could erect a block wall between the stairs and the main portion of the basement."

"I'll leave that all up to you. Let me know if there is anything I can do to help."

"Nah, you concentrate on the EMT training and I'll make some calls to see about getting used road plate and adjustable steel posts. You're going to have to help me, you did well in biology in high school and I barely passed. I'll get Paul to give me a hand installing the plates and welding the seams. I think we could empty one of the window wells and pump the concrete into the space. It might not be perfect, but I can't think of any other way to do it."

"I can."

"What?"

"We could dig down next to the house and install a culvert for no more than that plate and concrete would cost. All you'd have to do is connect the culvert to the house and put in a blast door. But that's a bunch of money to spend just to protect against World War 3. I thought we were trying to protect against the avian flu."

"That's what started our project, but why stop now? This is Kansas and the Country has an average of 1,000 tornadoes every year. Did you remember to order the 3M N-95 masks?"

"I ordered the cheaper disposable type (8000). I figured more was better and they were cheap enough so I got 240 masks. They also carried the exam gloves so I ordered a couple of boxes each of medium and large. Now if we get lucky, we'll be able to get the H5N1 vaccine and we'll have nothing to worry about."

"You know, there is that Tamiflu stuff they have. And, there's that Relenza, but you have to sniff it. We could get prescriptions from the Doc and keep it until we needed it. I read somewhere that if you begin the treatment within 48 hours, it will keep you alive."

"I'll talk to the doctor, but CNN said Tamiflu wasn't available."

"Fine, try anyway. I'm still going to need to get Paul to help me. If we do put in a corrugated conduit, it will need metal plates on the ends. I can get Roy Weiss to dig the hole for the conduit but it will take a real welder to weld plate onto culvert. We'll have to tar the outside, we wouldn't want it leaking."

"Class starts Monday, don't forget."

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It took Randy and June 9 months and thousands of dollars to prepare for the avian flu pandemic. In the process, they prepared for everything, including World War 3. Randy couldn't find a used section of 10' or 12' culvert so he had to buy new. He added a wastewater tank and a sewage pump to empty the tank into his septic system. He also added a water tank. Both passed the EMT-1 certification and they began looking at EMT-Intermediate coursework.

"That's the last of the initial fill, honey. We have 30,000-gallons of propane. Have you heard if they're offering avian flu shots yet?"

"Apparently not, but medical personnel will be the first people to get the vaccine. Is that why you wanted to get us EMT training?"

"Nope, I wanted to be able to avoid going to the doctor except in extreme emergencies. When the epidemic starts, people will be flooding medical facilities. I'd imagine that when the first case is reported in the US, we'd get the vaccine because we are EMTs. I'm interested in the Intermediate EMT training because the Basic class didn't cover enough."

"I checked with Doc Williams. He said that he'd help us get the medical equipment we wanted and some basic drugs, like IV solutions and IV sets. He wanted to know if we had a good time in Southeast Asia."

"What did you tell him?"

"Told him something came up and we couldn't go. He said it was just as well, we'd be going to the area where the avian flu is. Then I explained that we both got certified as EMT Basics and wanted to lay in the supply of basic lifesaving supplies."

"Did you get everything we wanted?"

"I got oxygen, a defibrillator, the IV solutions, and 3 types of pre-filled syringes, stuff associated with treating a heart attack like epinephrine, sodium bicarb and lidocaine. He also prescribed nitroglycerine tablets and some of the 10ml saline syringes to flush the IVs. Doc said that we were in good shape and probably wouldn't need any of those things. He said that if we had an emergency to call an ambulance and him. He could advise us on a course of action."

"I rather suspect that if we need any of those things, neither Doc nor an ambulance will be available."

"Are you fixing turkey for dinner tomorrow?"

"It's just the two of us; I got a turkey roast instead. Paul and Marilyn invited us over but I told her we just needed some time alone, it had been a very busy year. Next time I see an article on CNN, I'm not saying a word."

"I guess we did go on a bit of a spending spree, June, but you can't say we aren't prepared for anything that might happen."

"Randy, I don't mind all of the preps, but you know as well as I do that a plan never survives the first contact."

"Did you learn that in AIT?"

"Didn't you?"

"Yeah, but I never had to put it into practice."

"Why did you want M1As instead of AR-15s? I already knew how to shoot the M16 and M9."

"Stopping power, June. You had to learn to triple tap with the M9 and the only thing the M16 had going for it was the weight. Oh, I meant to tell you, I picked up 2 sets of ALICE gear at the surplus store and it was new with fanny packs."

"What are those for?"

"Bug Out Bags. Say one of us was in town and the crap hit the fan big time and for whatever reason we couldn't use our vehicle. I sort of figured if we each had an ALICE pack and the related equipment, we could hoof it home."

"It's less than a day's walk."

"Under normal circumstances, it is. I said the crap hit the fan, honey, so assume the worst case. That means carrying the pack, our rifles and pistols. It may mean coming home by an alternative route if the bridge is out. We'd need to have everything we'd need for 3 days, minimum."

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Randy and June Webster lived northwest of Lakin, Kansas in Kearny County. They had met in the Army when they had been stationed with the same Platoon. When their enlistments were up, they got married. They were both from the same general area of Kansas, the west central part of the state. They had big plans and had decided they wanted 4 kids. That was in 1983 and both were both 22. You didn't hear the names of their children because they didn't have any. That had been the first of many shocks in their lives. In fact, the OB/Gyn had recommended that she have a partial hysterectomy.

## An Unlikely Outcome – Chapter 2

Since Dr. Williams had referred her to him and both concurred, she had the surgery. That had been in 1987 at age 25, a lifetime ago.

Randy mother had died of breast cancer while he was in the Army. Then, not long after they'd gotten out of the Army and married, his father had been in a fatal auto accident. Randy was an only child and inherited the farm. June had entered the Army because her parents had been killed in an accident when she was a senior in high school. She had an older sister who lived in Kansas City. Into each life a little rain must fall, but in their case life had been a thunderstorm with high winds.

Paul and Marilyn Johnson were their best friends and farmed the adjoining farm. Paul had served in the US Marines and Marilyn had attended Kansas State University in Manhattan, 125 miles west of Kansas City. She had a BS in Secondary Education, specifically, English and Journalism. She taught English at Lakin USD #215. Most of the farmland on both farms was planted to wheat and Paul and Randy helped each other harvest.

There was a storm shelter on Paul and Marilyn's farm but it wasn't much more than just that, a place to go if a tornado was bearing down. During the 1990s, Paul got interested in amateur radio and got a general class ham license. He kept needling Randy until Randy caved in and got a technicians class license. Generally during the fall the 2 men hunted pheasants together several times and had a friendly competition going. In exchange for Paul helping with the end plates on the culvert, Randy offered them a place to stay if something happened and their storm shelter wasn't enough.

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The article had been on CNN during November of 2005. By Labor Day 2006, Randy and June essentially completed with their preparations and were planning on enrolling in the EMT-Intermediate class in January of 2007. All 4 of the friends were now in their early 40s and the Johnson's had 2 children, Susan and Donald, ages 15 and 12. By this time in the United States, George W. Bush had managed to struggle his way down to a 20% popularity level. The US was beginning to lower its troop levels in Iraq by not replacing soldiers as their units stood down and returned home. The other party had closed the gap in Congress during the 2006 elections and unless something changed, both the Congress and Executive branches of the government would be firmly back under control of the Democrat Party in 2008. The US Supreme Court was firmly packed with 5 conservative judges because, try as they might, the Democrats in the Senate couldn't prevent confirmation of Alito and the gang of 14 had prevented a filibuster.

The anti-war movement had been steadily growing in the US. Crackpots like Martin Sheen, Mike Farrell, Susan Sarandon and Cindy Sheehan had managed to turn the war in Iraq into another cause like the protests of the 60s and 70s. Bush had announced that the Iraqi military and police were able to maintain order in the Country and the US

would draw down the troops over the next 9 months. The subject of Iran and their nuclear weapons hadn't been brought up in the televised address. The following day, White House Press Secretary Scott McClellan declined comment. White House press briefings had turned into free-for-alls. If the Press Secretary wouldn't say what they wanted...

Recovery of the Gulf Coast after hurricanes Katrina and Rita had slowed to a crawl because the state of Louisiana objected to the plans set forth by the US Army Corps of Engineers to rebuild the levees to withstand a category 5 storm. The state of Louisiana had brought criminal charges against the contractors who had failed to drive the pilings supporting the levee walls 18.5' deep as specified in the Corps blueprints.

In the weeks after the storm, Corps officials said the levees and walls – designed to handle a Category 3 hurricane – were topped and overwhelmed by Category 4 Katrina. But subsequent data collected by investigative teams indicate Katrina's surge was actually below Category 3 when it reached the 17th Street and London Avenue canals. The studies also showed the storm surge did not get within 2 feet of the tops of the flood-walls on the 17th Street and London Avenue canals before the breaches occurred.

The Louisiana Attorney General hadn't said whether action was planned against the US government.

In other news, the Pentagon expressed concern over the continued buildup of the People Republic of China's military. Probably using American money, the Chinese had purchased more Russian ships and submarines to compliment the growing fleets of Chinese built ships and Russian bombers. Defense Department analysts suggested that the Chinese Navy would reach the strength necessary to support an attack against Taiwan in early 2009.

Obama looked like he might be the Democrat presidential candidate and Joe Lieberman his running mate. The Republicans were looking at a moderate war hero, John McCain and McCain was considering Rick Santorum. The campaigning had started well early of the November 2008 election. But you couldn't trust the estimates of the media; they had thought John Dean had been a front-runner at one time. At least Dick Gephardt wasn't making a bid for a change.

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Timeframe: August of 2008.

The H5N1 avian flu continued to spread albeit slowly. WHO still hadn't confirmed human transmission but the CDC wasn't so certain. As the number of cases in Europe and the Middle East began to rise with a 50% mortality rate, The US had produced a vaccine for the H5N1. They had also embargoed international flights absent health certificates for all of the passengers.

*My fellow Americans,*

*I come to you tonight with an announcement from the Centers for Disease Control. A recent arrival on a flight from the Philippines has been diagnosed with the H5N1 avian flu virus. Effective immediately, your government will take the following steps to contain the outbreak.*

*Travel restrictions will be effective immediately and the DOT will suspend all forms of public transportation including airlines, trains and bus service pending a determination of the extent of the outbreak. The only forms of non-local transportation being permitted are distribution of food and medical supplies. Fuel supplies are ample for the moment and I have agreed to release up to 100 million barrels of fuel from our strategic petroleum to reserves to meet any shortfalls. All travel will be limited to your local community and for rural residents the nearest community.*

*In addition, in cooperation with the governors of the states, the National Guard units are being federalized to serve the residents of their home states.*

*In addition to the H5N1 vaccine, the government has stockpiled 40 million cards of Tamiflu. Tamiflu has proven effective in most cases provided it is administered within 48 hours of contracting the avian flu.*

*The available treatments are sufficient to treat 20 percent of the population. Your government has worked with various manufacturers of protective masks and has sufficient quantities of the N-95 masks to protect the entire population. These masks have been forward positioned in state capitals and key cities and distribution will be completed within 7-10 days.*

*Of greatest concern will be the inability of public utility companies maintaining the flow of electricity, water and natural gas. Of secondary concern is the possibility that the outbreak will extend into the fall. Public and private schools are set to open in less than a month and schools are a prime source of spread for any virus. I have therefore issued an Executive Order delaying the resumption of school in the fall.*

*Worldwide, the news is far reaching with many third world countries unable to secure the flu vaccine. Informed sources have stated that the outbreak in Southeast Asia has reached epidemic and possibly pandemic proportions. In an effort to limit the spread of the disease in this Country, I have ordered all chickens, turkeys and all farm poultry destroyed. As of this time the exact mechanism of the spread of the virus would appear to include human-to-human transmission and the virus should be considered airborne. At such time as the actual manner of transmission is identified and confirmed, modifications of the protocols in place will be modified or expanded as necessary.*

*The CDC will be making further announcements in the coming days. Thank you and good night.*

*God Bless America.*

"Did you watch the President's announcement Randy?"

"Just turned it off. You should have taken my advice and gotten those immunizations like June and I did. From what he said, it doesn't sound like any of the members of your family are going to qualify for the flu vaccine, either, Paul."

"Do you think Doc Williams would give us the immunizations June and you got if we ask?"

"He would if he has the vaccines. I'll talk to him and see if he will include Marilyn in the group of persons for whom the vaccine is deemed critical."

"What good would that do?"

"If they vaccinate her, they'll do the entire family. I can try it from the angle that she's a teacher."

"The President said the schools would be closed."

"I know, he couldn't have thought that one up on his own. The problem with the smallpox vaccine is that once it's reconstituted, it has a short shelf life. Still, the doctor may want to vaccinate his whole staff."

"What did the two of you get?"

"A dose of everything. We're old enough that we had smallpox vaccine as kids. We both had Yellow Fever vaccine in the Army. We got boosters for all of the childhood diseases and some we hadn't had before like Hepatitis. Call the Doc, and if he'll give you the shots, I'd head to town just as soon as he can give them."

"Did you both finish the EMT-Intermediate training?"

"Yep. It reinforced our EMT Basic and we learned several new procedures. We had even talked about Paramedic training, but under the circumstances, that's not going to happen. You call Doc first and I give him a ring later about the flu vaccine."

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"Doc? Randy Webster. Did Paul Johnson call you? Good. You can? Great. What's the word on the flu vaccine? You know, Marilyn is a schoolteacher; I don't suppose there's enough to vaccinate them for the flu is there? How many doses did you get? Tomorrow at 9am? June and I will be there. Thanks Doc."

"Well?"

"June someone screwed up, Kearny County got extra flu shots but they got shorted on the Tamiflu. Paul and Marilyn will get all of their immunizations over the course of the next few days, including the flu vaccine. You and I have to be at the doctor's office at 9am in the morning."

"Did he have any additional information?"

"Human-to-human transmission is confirmed, they have an outbreak in San Francisco. It was a 747 and a lot of people could have been exposed. We'd better check everything and do our shopping tomorrow because I don't think we'll be going to town for a while."

"What else do we need to do?"

"I'm going by the County Fire Department and see if I can get a radio. It will allow us to connect to the hospital. If they restrict travel too much, you and I may end up putting our training to practice."

"At least it's rural, what was the latest population estimate?"

"Less than 5,000 in the entire County."

"We better review the expiration dates on the meds and replace any that are close to expiring. Did you ask Doc about additional prescriptions?"

"Didn't have that chance, we find out tomorrow. He said we were getting to vaccinations, the H5N1 vaccine and AVA."

"But AVA is the anthrax vaccine!"

"Didn't make any sense to me either, but I have two arms so he can give me all the shots he wants."

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## A Simplified Guide to Antibiotics and Their Uses

### Penicillins

The original penicillin-G (Pen G), along with more the common penicillin-V (Pen V), are used to fight gram-positive bacteria, such as anthrax. Pentids, the brand name for penicillin-G, come in 400 and 800mg pills. Brand names for penicillin-V include V-Cillin-K and Pen Vee K. The basic Pen G may be purchased from farm and veterinary stores for far less expense than through pharmacies, though make sure you only buy the refrigerated brand. The active ingredients in the unrefrigerated variety are far lower and potentially inadequate.

Pen G must be taken on an empty stomach. This is not as critical for Pen V. A dose of 250mg (i.e., 400,000 units), for people weighing 50 pounds or more, is taken four times daily. A rule of thumb for children weighing less than 50 pounds, the dosage should be reduced by 20% for every 10 pounds of less body weight.

These penicillins are more likely to cause allergic reactions, and fatalities, than synthetic penicillins such as ampicillin. Some of the allergic reactions are caused by procaine (Novocain) that is added in some Pen G formulas.

### Ampicillin

Brand names of this synthetic penicillin include Principen, Omnipen, Polycillin and Totacillin. These are also effective against gram-positive microbes such as anthrax.

Dosages of ampicillin are the same prescribed for penicillin. This antibiotic should be taken, ideally, on an empty stomach.

Strains of anthrax that resist penicillin may be more susceptible to destruction by ampicillin. Also, ampicillin may be more helpful than penicillin for killing a broader spectrum of infections.

### Cephalosporins

These are also effective against anthrax. One gram of Cephalexin taken every six hours is recommended. Brand names for this are Keflex, Keflet and Keftab. One gram of the related Cefadroxil, brand named Duricef, should be taken every twelve hours.

### Erythromycin (Macrolide family of antibiotics)

Erythromycin and its relatives provide a broader spectrum of coverage than penicillins. Brand names of Erythromycin Pediamycin, Erythrocin, Eryc, EES, Ery-Tab, PCE, Ilosone, and E-Mycin. Other related antibiotics, such as clarithromycin (Biaxin) and azithromycin (Z-pak or Zithromax) may also be effective. A liquid form of erythromycin, called Gallimycin, is available for injection. The oral dose of this injectable product is the same.

Taken on an empty stomach, this may be used to treat more difficult cases of anthrax. If upset stomach occurs, it should be consumed with a bit of food. Avoid eating citrus fruits or products, which deactivate these antibiotics during digestion. Note: Fatal heart attacks may result from taking these antibiotics in combination with Seldane (terfenadine), Hismanal, or Seldane-D.

For individuals weighing 150 pounds or more, a 500mg dose is recommended. People weighing less should reduce their dosage proportionately.

### Aminoglycosides

These antibiotics that are effective against anthrax, tularemia, and the Bubonic plague, include: Streptomycin, Gentamycin, and Neomycin. They can all be extremely toxic. Primary organs at risk for destruction by the aminoglycosides include the kidneys and inner ears.

Each of the aminoglycosides must be injected, and cannot be taken orally. The oral dosage forms of these antibiotics are effective only against gastrointestinal (GI) tract infections of the stomach and intestines.

Gentamycin (Garacin) powder can be purchased in bulk. It cannot be absorbed when taken orally, but it can be effective against certain biologicals striking the GI tract such as botulism.

Streptomycin, taken two to four times daily, in one to four gram doses, equally spaced throughout the day. It can be used in combination with tetracycline until the person's fever breaks. Then the tetracycline can be continued alone. Otherwise, streptomycin should be used consistently for a week to ten days.

Gentamycin, is effective against tularemia and the plague. It should be injected intramuscularly or intravenously every eight hours in emergency measures of 1.7mg per kilogram body weight. As soon as symptoms of disease disappear, the dose should be reduced to 1.0mg per kilogram of body weight for the remaining 7-10 day period.

This antibiotic is available in bulk through veterinary stores. It is likely that this less expensive product may be successfully used orally to defend against the plague or tularemia germs infecting the gut.

Neomycin, when given in doses of 500mg, four times daily, may be helpful against anthrax, plague, and tularemia, though it has not been traditionally prescribed for these. Use this only if the other aminoglycoside antibiotics are unavailable.

### Fluoroquinolones

In daily doses of 300mg per kg of body weight (i.e., 65mg per pound), Ciproflavoxin (Cipro) is effective against tularemia and anthrax. The daily dose should be divided into four doses taken every six hours for two weeks. Following the terrorist attacks on September 11, 2001 on the Pentagon and World Trade Center, this extremely expensive drug has been in high demand as the FDA's antibiotic of choice against anthrax.

### Chloramphenicol

Effective against anthrax, tularemia and plague, Chloramphenicol (Chloromycetin) has a relatively high rate of lethal side effects. Thus, persons allergic to safer antibiotics should only use it, or in the event other medications are unavailable. More expensive than other antibiotics, this injectable product can also be consumed orally and absorbed

effectively into the bloodstream. Ideally, taken on an empty stomach, it may be consumed with food to reduce stomach upsets.

Chloramphenicol has the same spectrum of activity as erythromycin. Thus, it should never be given with erythromycin unless under emergency conditions at the first sign of biowarfare-induced illness. It may, however, be taken with Tetracycline for a broader spectrum of effectiveness. This combination may be wise if it is unclear which biological weapon is causing illness, and if rationing is not in effect.

The injectable form of chloramphenicol tastes awful! For people weighing 200 pounds or more, 2,500mg doses recommended.

## Tetracyclines

Tetracyclines (brand named Sumycin and Achromycin-V) are broad-spectrum antibiotics available from farm supply shops and veterinary stores in the form of oxytetracycline. These can be used effectively against all most strains of anthrax, plague, and tularemia.

Oxytetracycline comes in bulk powder form under the brand name Terramycin-343. It also comes in combination with livestock feed (Advance Calf Medic). This could be used in a pinch if other antibiotics were unavailable. There are 3 grams of active antibiotic in each pound of feed. A low dose could be provided by consuming almost 1.5 ounces; a high dose twice that could be measured and eaten.

Two newer classes of tetracycline are Doxycycline and Minocycline. Brand names for these tetracyclines include the Doxycyclines-Vibramycin, Vibra-tabs, Monodox and Doryx; and the Minocyclines called Minocin.

Tetracycline is typically taken four times a day, doxycyclines once per day or twice per day when taken with Minocycline. The two newer cyclines can be taken with food, not the older tetracycline. They, thus, tend to cause fewer stomach upsets. Doxycycline is typically less costly than traditional tetracycline, and Doxycycline and Minocycline provide a broader spectrum of antibiotic effectiveness than the old standard. Stains of biological weapons they may have been manufactured to resist tetracycline might be more susceptible to the newer cyclones.

As a rule of thumb, four 250mg doses of tetracycline are prescribed daily, that is, one dose every six hours for your typical 100-pound person. For persons weighing less than 100 pounds, reduce this dose accordingly. For instance, if a 100-pound person receives 1,000mg per day, then a 50-pound person would receive 500mg per day, or four 125mg doses q. 6 hours. The Doxycycline dosage is typically 200mg the first day, and 100mg doses following for up to ten days. The oxytetracycline (Terramycin) dose is the same as standard tetracycline. Another alternative tetracycline, called demeclocycline (Declomycin), may be substituted for standard tetracycline employing the same dose schedule as well.

## Preserving and Administering Your Antibiotics

Most antibiotics and drugs can be preserved by refrigeration, so long as they are kept dry. If traveling through extreme temperatures, antibiotics should be encased in Styrofoam containers, at best, and efforts should be made to avoid heat or freezing cold.

Warning: No drug should be consumed beyond its expiration date, especially Tetracycline antibiotics. Severe reactions may result from this expired antibiotic. However, when faced with a life-or-death situation, as might be presented with biological warfare or bioterrorism, such chances might have to be taken.

Antibiotics are typically administered orally or by injection. However, if the patient is comatose, the oral route may be circumvented rectally by using a plastic oral syringe available in most drugstores. This should be inserted as deeply into the rectum as possible. Use of a few drops of water, then larger amounts of cocoa butter, for dissolving the antibiotic. Cocoa butter is available in most drugstores in sticks that are melted in a jar placed in hot water. The butter is commonly used for suppositories and will hold the antibiotic for absorption better than water. Water may run out of the rectum and thereby precious antibiotic may be lost. So if water is all you have, use as little as possible to dissolve and inject the measured amount of powdered antibiotic.

Antibiotic tablets can be crushed and powdered by placing them between two napkins on a hard surface and pounding them with another flat hard object or instrument. The absorption of active antibiotic is less, given the rectal route of administration. For this reason, the dosages should be increased to compensate. (Copyrights to article waived.)

The easiest to obtain and cheapest of the antibiotics listed above are Erythromycin and Keflex and both are available as generics. I didn't see Amoxicillin mentioned. It is used to treat: Strep Throat, Strep Throat and Tonsillitis, Infection of the Middle Ear by H. Influenzae Bacteria, Infection of the Middle Ear caused by Streptococcus, Middle Ear Infection, Acute Bacterial Infection of the Sinuses, Severe Sinusitis caused by Streptococcus Pneumoniae, Severe Sinusitis caused by Haemophilus Influenzae, Throat Infection, Throat Infection caused by Haemophilus Influenzae, Infection of the Throat caused by Staphylococcus Bacteria, Infection of the Tonsils caused by Staphylococcus Bacteria, Infection of the Tonsils caused by Haemophilus Influenzae, Pneumonia caused by Pneumococcus Bacteria, Bacterial Pneumonia caused by Haemophilus Influenzae, Bacterial Pneumonia caused by Streptococcus, Bacterial Infection with Chronic Bronchitis, Chronic Bronchitis caused by Streptococcus Pneumoniae, Chronic Bronchitis caused by Haemophilus Influenzae, Lower Respiratory Tract Infection, Ulcer of Duodenum caused by Bacteria Helicobacter Pylori, Peptic Ulcer due to Bacteria Helicobacter Pylori, Infection of Genitals or Urinary Tract, Infection of the Genital and Urinary Tract due to E. Coli, Infection of Genitals or Urinary Tract due to Proteus, Infection of Genitals or Urinary Tract due to Enterococcus, Skin Infection, Skin Infection due to E. Coli Bacte-

ria, Skin Infection due to Streptococcus Bacteria and may also be used to treat:

Typhoid Fever, Skin Infection caused by Anthrax, Pneumonia caused by the Bacteria Anthrax, Bacterial Stomach or Intestine Infection caused by Anthrax, Infection of the Brain or Spinal Cord caused by Anthrax, Anthrax, Treatment to Prevent Anthrax following Exposure to Disease, Lyme Disease, Treatment to Prevent Bacterial Infection of a Heart Valve, Prevention of Group B Streptococcal Infection in Newborn, Pediatric Fever without a Source. It is available as an Rx in powdered form and if the doctor orders, doesn't have to be reconstituted. Once reconstituted, it must be used in 7 days and kept refrigerated.

Although groups initially considered for preexposure vaccination for bioterrorism preparedness included emergency first responders, federal responders, medical practitioners, and private citizens, vaccination of these groups is not recommended. Recommendations regarding preexposure vaccination should be based on a calculable risk assessment. At present, the target population for a bioterrorist release of *B. anthracis* cannot be predetermined, and the risk of exposure cannot be calculated. In addition, studies suggest an extremely low risk for exposure related to secondary aerosolization of previously settled *B. anthracis* spores. Because of these factors, preexposure vaccination for the above groups is not recommended. For the military and other select populations or for groups for which a calculable risk can be assessed, preexposure vaccination may be indicated.

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"We won't have to go back to town for a year."

"I hope not. I wonder how Paul and Marilyn made out."

"Give him a call and find out. I'll bet they're sore."

"Paul, Randy. How did it go?"

"We have to make 2 more trips back to town to finish the vaccinations. What on earth is AVA?"

"Anthrax vaccine."

### An Unlikely Outcome – Chapter 3

"Doc said either you or June could check our arms in a week for verification of the smallpox vaccination, what is that about?"

"You'll develop a pustule if the vaccination takes. That's why people have a scar on their arm from smallpox vaccinations. We should all be ok, for you, June and me this is the third vaccination and probably the second for Marilyn. The kids' immunities will only be for 6-10 years, but that should be more than enough. The actual vaccine is a powder with a shelf life of nearly forever. The vaccine he used on us was 20 years old."

"I don't remember being stuck so many times before."

"On revaccination, they apply at least 7 spots of vaccine as opposed to 3 for the first vaccination."

"Why is Doc giving us vaccines that the CDC doesn't recommend?"

"June asked the same question, I don't have any idea. Did he write you any prescriptions?"

"Some antibiotics. Keflex and Erythromycin. He also told us to start taking one aspirin a day, what was that all about?"

"Aspirin is a blood thinner, Paul. Maybe he just wants to be on the safe side. Did you get regular aspirin or Ecotrin?"

"He said to get generic Ecotrin. We got 2 500-tablet bottles. We got 120 caplets or capsules of each antibiotic. Do you think we'll have any trouble out here in the middle of nowhere?"

"I hope not. I stopped by the Fire Department and picked up a radio so if the phones go down, we can maintain contact with them. I'm a little concerned; one would have thought that the Chinese would have prevented anyone exposed to the flu from getting on a plane."

"Have you heard anything on the radio or TV about how widespread the flu is over there?"

"Not a word. If you have the time, how about coming by and helping me get this antenna up? I'll see if June can toss a pot roast on the stove and we can have dinner after were done."

"It will be about 30 minutes; I'll have to round everyone up."

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"What did you put in for a radio tower?"

"MA-770MDP."

"Did you get extra standoff arms?"

"I have a total of 3 so I can have up to 4 antennas."

"What do you have for radios?"

"I bought the one you recommended, the all band Kenwood. This will use up my last spot to mount an antenna. It will have to go on the main mast itself or we'll have to move the HF antenna to the mast and put the new antenna in its place."

"I recommend that we move them. The HF antenna must weigh a lot."

"It's a MFJ-1798 10 Band Vertical that covers 75/80, 40, 30, 20, 17, 15, 12, 10, 6, 2 meters. My Comet antenna covers 2m, 70cm and 23cm and I have the CB antenna."

"Do you have an antenna tuner?"

"Of course, the one in the Kenwood is built in."

"You could probably use the 10-bander for CB in a pinch. Do you have the antenna assembled?"

"Nothing to assemble, it's a single piece antenna."

"What about coax?"

"I ran a RG-213-U for each antenna position when I put in the mast so all we have to do is mount the antenna and connect the coax."

"You didn't need my help to do that Randy."

"I had an ulterior motive, Paul. We really should talk about this possible pandemic."

"What's to talk about? We have the vaccinations and even if it doesn't keep us from getting sick, it won't kill us."

"There are only about 340 million treatments between the vaccine and the Tamiflu. That represents 120% of the population. Why would Doc even have AVA? Why would the Fire Department give me a radio and antenna when I just stopped by to see about getting one? I have a lot of clues, but I'm not sure what it all means."

"Did you have any trouble getting the original vaccinations from the doctor?"

"We got our passports and gave him a song and dance about going to Southeast Asia."

"We don't have our passports and I didn't do anything more than ask him for those vaccinations. He almost seemed eager to provide them. How many people from Kansas go to places where they'd need a Smallpox vaccination or Yellow Fever? I can see him being prepared to give us boosters of the routine childhood immunizations and the stuff we didn't get growing up but Smallpox was eradicated quite some time back."

"He even gave us RVA rabies vaccine or didn't you notice? That's a 3-dose vaccination. You get the 2nd dose at one week and the 3rd at 21 or 28 days."

"I guess that explains why he made 2 more appointments for more vaccinations."

"That plus he'll want to check your arms for the pustule from the Smallpox vaccine. It just seems to me that he is taking precautions that wouldn't be taken in normal times. On top of that, since we've all been vaccinated for H5N1, why would he give me 10 cards of Tamiflu? He didn't prescribe it; he simply gave it to me. That stuff is expensive, you know."

"What else did he give you or prescribe for you?"

"Let me tell you Paul, someone in the area could have a MI and June and I have all of the drugs we'd need to treat the person and could probably avoid transporting them. It's about as close to a Paramedic drug box as one could imagine. Doc said that the drugs we were unfamiliar with might be necessary and any emergency physician could instruct us in their use over the Fire Department radio."

"So what, you're going to have a clinic?"

"I don't believe we will; that's way above our training level. But now that you mention it, that's possible. You can't believe some of the things that we have. We even have a couple of boxes of casting materials."

"As far as we are from Lakin, it sort of makes sense. Especially if the flu breaks out there."

"But these days, they usually take an X-Ray before they set a broken limb."

"They didn't have X-Rays 100-years ago, so it must not be absolutely necessary."

"It is to make sure the limb is properly set. I'm not sure I could do a closed reduction."

"Maybe you won't have to find out."

"I certainly hope not."

"Randy said you have quite the fancy drug box."

"We have everything we didn't have and things we aren't trained to use. We were thinking about taking paramedic training but with the flu outbreak, that's not going to happen. Did Randy tell you the others things we have like casting materials and so forth?"

"June, I told him we could probably even treat a MI in a pinch."

"We can't let it get to that, Randy. At least nothing beyond initial treatment and stabilization for transport because we don't have the ability to run any of the tests they usually run. Several of those blood tests are fairly specific, like arterial blood gases, electrolytes and so forth. The *trauma panel* usually consists of some constellation of the following studies: a complete blood count (CBC), electrolytes, BUN, creatinine, amylase, protime (PT), prothrombin time (PTT), blood type and screen (T&S) or type and crossmatch (T&C), urinalysis (UA), ethanol level, urine toxicology screen, arterial blood gas (ABG), lactate, and an electrocardiogram (ECG)."

"What kind of tests can you do here?"

"EKGs. However Doc suggested that he might be able to get us some good used lab analysis equipment from PEMED in Denver. They buy several truckloads of used equipment every day and have hundreds of items in stock. He said he'd check with them and let us know. He seemed concerned that we might need some equipment in light of the announcement and said he'd call."

"That right, Randy, I forgot about that. He said we could also get some kits from Craig Medical in Vista, California by overnight. They have some kits, but they're limited in scope, have shelf lives and are fairly expensive."

"We might be able to help some on that since you have the shelter and all of the food in your basement. We went ahead and bought six of those deluxe food things from Walton Feed in Idaho. We also got 25 gallons of oil, some sugar and coffee."

"Is your freezer full, Paul?"

"We have 2 hogs and a beef at the locker plant to pick up on Monday. How about you?"

"We did the grocery store and we're fully up on staples, by we're short on meat."

"I'll run another beef and two more hogs in tomorrow. We can pick it up when we go back next week for our shots. Want to help me butcher chickens when I get back from town?"

"Why don't I ride along in case I think of something that we need tonight?"

"I'll pick you up at 8am."

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"If you have the time, stop by the store and see if they have any more Folgers."

"Anything else? Flour, sugar, yeast or oil?"

"Get one of those 50-packs of Bic lighters and get all of the Marlboros they'll sell you."

"We really should quit smoking now that we know better."

"Next lifetime. Do you need cash?"

"I might just as well empty out the savings account, who knows when we'll get to town again?"

"You'll get back to town next week to pick up the meat. They would only let us get 2 boxes of Sudafed, since you're both going to be at the store, get 2 more."

"I'll start a list. Lighters, cigarettes, Folgers and Sudafed, anything else?"

"Tide. Get those big 18 pound boxes."

"How many?"

"Four."

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"There's Paul, I've got to go. We'll stop at the store and pick up the things on the lists on the way back."

"Find out what kind of candy bars the kids like and buy a couple of boxes of those. I'll take a box of Snickers."

"I called the locker and they can have the meat ready by Monday. Except for the hams and the bacon. I can pick that up when we go in for our 3rd shots. Why did you bring a rifle, expecting trouble already?"

"It's gotten to be a habit recently. We carry our BOBs and weapons everywhere we go."

"Why, the nearest big city is Wichita and that's over 200 miles away?"

"Right and it is only 330 miles to Denver. Both places have large airports and who is to

say how fast that virus will spread?"

"Do you mind if we stop at the grocery store on the way back?"

"I have a list too. I'm supposed fill in a few holes. I hope you didn't have Sudafed on your list."

"I don't, why?"

"It's pseudoephedrine and with the meth craze, you can only buy one box or bottle per person at a time. The store started that when they started the Meth Watch program. We got 2 when we shopped yesterday and June wants 2 more."

"Do you want chicken for supper?"

"After we spend all day butchering them? I'm not queasy, but I think I'll pass. You can drop me off on the way home and June and I will come over and spend the day. How many do you have to butcher?"

"About 100. It will take the 6 of us about 2 days."

"There's a Sheriff's car pulled across the road, what do you suppose that is about?"

"It's obviously a roadblock. I wonder if they're trying to block all of the roads into town."

"Hey fellas, headed to the locker?"

"There and the grocery store. Why the roadblock? Is there a problem in Lakin?"

"Sheriff Jabone just wants to keep the lid on tight. Are you carrying weapons?"

"Yes, but they're unloaded and cased."

"Rifles or handguns?"

"Both."

"Where are they?"

"Behind the seat. If you want to see them, we'll have to get out of the truck so you can access them."

"Not necessary, but leave them in the truck when you shop. Will the 2 of you be coming to town very often?"

"We pick up the meat on Monday when we come back to the doctor to get our shots."

Then we'll be back 2 weeks after that to finish our vaccinations."

"What kind of vaccinations?"

"Rabies, can you believe it?"

"Get bit by a dog?"

"Protection in case I do. Tough times lately, Deputy. Anything else?"

"Nah, just leave your weapons in the truck."

"You forgot to tell him your Social Security Number, Paul."

"He didn't ask. In fact he didn't ask to see either of our IDs. I figured it was better to give the Sheriff's Department a heads up so we don't have any trouble in the future."

"We should eat well for the next year, 2 beefs and 4 hogs. I realize you said you have 100 chickens, but June and I eat one a week, so I'm going to see if I can buy a case of chickens at the market."

"Let's get this livestock unloaded and get over there."

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Paul and Randy got back to the house around 11am. They unloaded Randy's stuff and Randy told Paul he'd see him in about an hour. June and he bagged the chickens in Ziploc freezer bags and added them to the freezer. Randy had loaded up on extra bacon and butter, figuring 4 slabs of bacon would leave them short and he could always freeze the butter. Paul was off by a day on his estimate of the butchering time. They worked until dark on Tuesday, all day Wednesday and well into the afternoon on Thursday before they had the chickens scalded, plucked, gutted and bagged. Randy's box of chickens might have cost more, but it sure was less work.

Authors note: Just because the President ordered all poultry destroyed didn't mean that it happened the way he envisioned. Some poultry was already in the supply chain and farmers' with birds that probably hadn't been exposed butchered them instead.

"Are you going to have enough room in your freezer?"

"I always have had, Randy. I have the 25ft<sup>3</sup>; chest freezer and a smaller 21ft<sup>3</sup>. There should be plenty of room, we freezer a fair amount of vegetables. What size is your freezer?"

"It's a 21ft<sup>3</sup>."

"You're going to be short on room. If you can handle it, I suggest you get another and I'll help you get it into your shelter. The temperature down there is pretty even so that it won't work the freezer hard. Say, will you answer a question?"

"Sure, what?"

"What got you off on this survivalist trip of yours?"

"June saw an article on CNN about the avian flu back in November of 2005. We started then and have been at it ever since. We have the shelter, food, medical supplies, a 30kw propane generator, 30,000 gallons of buried propane and we took EMT B and EMT I training. The only livestock we have are the horses and they aren't that much work. By the way, what will I owe you for the meat?"

"We'll get the live weights from the locker and whatever the market price was that day on swine and cattle. You can pay the locker charges when you pick the meat up. I'll have to let you know on the animals. My guess would be about \$1,200 for the beef and maybe \$150 each on the hogs. Beef was running \$0.96 and hogs were \$0.65."

"I still have to top off the propane for the coming winter."

"How big of a tank do you have?"

"1,100-gallons, it lets us run for 2 years without a refill and we don't have to worry about the availability of fuel. When we started, Dad had that old 500-gallon tank; but it needed a new relief valve and we ran low in the spring if it was a bad winter."

"How long will your generator run on that much fuel?"

"There are 8,766 hours in a year so it should run well over a year. At full power, there's enough propane for 7,143 hours at full power. I figured on about half power or 11,111 hours; more than a year. I got several cases of oil, oil and air filters and a few parts the seller recommended. I also got a spare set of parts for my Dodge and an extra set of tires. Hell, June and I are prepared for everything from a tornado to World War 3."

"You got M1As?"

"That's right, what did you get?"

I have 2 M1As, one standard model and one Super Match model with a very good Leopold scope and a Harris bipod. Like you, I prefer the M1911 so Marilyn and I have those and the kids each have an AR-15 HBAR and a Browning Hi-Power with those 13 round magazines. I realize that Don is a bit young, but I got a good price and figured he could grow into them. We have 2 12-gauge and 2 20-gauge Remington Express Combos and 4 of the Ruger 10/22s."

"Those are almost the same guns we have except both of our M1As are the Loaded model and the 22's are 9422 Winchesters. You weren't a sniper in the Corps were you?"

"Force Recon. But I always liked the M14s we had and decided to go with one for Marilyn and an upgraded one for me."

"What do you shoot in them?"

"I have 1,000-rounds of Black Hills Match 175gr BTHP and 4,000-rounds of Lake City overruns for my rifle. I got Marilyn 5,000 rounds of the Lake City overruns. We have 500-rounds for each pistol, extra magazines and a total of 10,000 rounds of 5.56."

"What did you do for your shotguns? I have 500 rounds of Federal 9-pellet 00 buck and the same amount of slugs. I also got an assortment of hunting ammo, #2, #4 and #6 shot."

"We probably about the same as you have. The 20-gauge ammo is mostly hunting loads. I didn't get many slugs or buckshot. I have 20 bricks of .22LR and 1,000 rounds of both 9mm and .45ACP."

"Just thinking ahead, what will we use for communications if we lose the phones?"

"2-meters ok with you? Each of our vehicles has a 2-meter transceiver and we each have a 2-meter handheld."

"Works for me, I'll add the 2-meter radios to our vehicles and get two of the handhelds. All I have in the vehicles now is the CB radios."

"You and half of America, Randy. I wouldn't consider those very secure."

"I want you to know if that situation in the Far East heats up and turns into a war, the 4 of you should plan sitting it out in the shelter."

"I didn't pay a lot of attention to it, how did you finish it off?"

"I put in an electric stove and oven, our old microwave, a ¾ bath, kitchen sink and 4 pairs of bunk beds. The toilet and sink drain into a storage tank and I have a sewage pump to empty the tank into the septic system. There's also a water reservoir that holds over 1,000-gallons. We have one freezer in the basement at the moment, but I think I'll put the 21ft<sup>3</sup> in the shelter for the extra meat. All of our medical stuff is stored in the shelter along with most of the guns and ammo. The extra stuff is in the basement, I put up that block wall to segregate the storage area from the stairs."

"Is that it?"

"I have a laptop and a library of CDs in the shelter. Plus we put in that old black and

white TV and whatever VCRs and CDs we had. The boom box can provide a means to play music CD's and be a backup AM/FM radio."

"Did you hear from Doc?"

"He found a good used blood analyzer and got testing supplies. So, I guess we can probably handle that heart attack like I thought as long as we can keep a clear channel to the hospital. He said he'd give me some of the Craig Medical blood typing kits. I could do it manually, but these make it easy. The only problem I can see is if we end up needing blood. He said we could cross match and make a live transfer if required."

"Sounds complicated."

"Cross matching is simply combining the blood from the two individuals and making sure it doesn't congeal. June and I are O- so we both universal donors."

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Except for picking up the meat and finishing their vaccinations, the two families were ready to stay out of town for a year, possibly more. They hadn't lost electricity or the phone so far, but Paul and Randy figured it was only a matter of time. Fortunately the natural gas the power plant used was locally produced from wells. As long as Sheriff Jabone kept a lid on the town and the County, they were ideally situated. Lakin was the junction of US 400 and Kansas 25. The nearest airport was in Garden City and it wasn't Denver International.

The following Monday the Johnson's got the second set of shots and stopped by the locker to pick up all of that meat. There were two feeder cattle, live weight about 1,250 pounds, and 4 hogs, live weight about 225 pounds cut and wrapped and the only thing they couldn't bring home was the hams and bacon. Paul always had the picnics smoked as ham and Randy had gone along with that; ham was going to be hard to come by. The locker plant told Paul they'd be ready in two weeks, in time to be picked up when they got their 3rd round of shots.

Meanwhile, Randy and June had ordered a 25ft<sup>3</sup> chest freezer from the Sears catalog and it had been delivered on Friday. It had taken Randy and Paul nearly an hour to get it down to the basement. While it wasn't so heavy the two of them couldn't move it, it sure was awkward. Randy hadn't connected the shelter to the basement with any intent of trying to move a freezer into the shelter. It took them a six-pack of Coors to finally get it there.

## An Unlikely Outcome – Chapter 4

Earlier...

"How do you want to do this with the freezers, June?"

"We'll put all fresh meat in the upright and pull the contents of the chest so we can put the oldest meat on top. We can divide the frozen vegetables between the two."

"We just needed an excuse to drink up the last six-pack of Coors."

"They said on TV that it was supposed to snow tonight and we could get from 2-4"."

"I'd better put the blade on the Ford; you know how it drifts up by the road."

"Are we planning on going to Church on Sunday?"

"I think God will forgive us if we stay out of town. Paul and Marilyn said they'd pick up the meat and pay the processing charges. I'm guessing about \$1,500 for the meat plus whatever the locker charges."

"It won't freezer burn will it?"

"They put it in plastic and then wrap it in Kraft paper. Paul said that they never had any problems. Any more about the avian flu on the TV?"

"CNN said that the outbreak in San Francisco involved nearly 1,000 people. The fatality rate seems to be 50% among the people who haven't been vaccinated. It has spread to Santa Barbara, Los Angeles and San Diego."

"Still confined to California?"

"You're dreaming, right? It's turned up in New York, Atlanta, Chicago and Dallas-Fort Worth. There are also outbreaks in Denver and Chicago, but they haven't classified it yet. Anyway, the travel restrictions are in place and travel is limited to and from work and shopping for necessities only."

"How are they enforcing it?"

"So far with the state National Guard units. That White House spokesman said they were considering suspending Posse Comitatus, if the Guards couldn't handle it or there was a problem anywhere. They've dispensed vaccines to all military and health care workers. Over the road truckers are also being vaccinated to ensure the flow of goods."

"That's not likely. Bush didn't use federal troops after Katrina and Rita for law enforcement. At the moment, we don't have any troops overseas so the National Guard units

should be able to handle it. From what you've told me we don't have a problem so far."

"Don't have a problem? Marilyn is out of work, the kids can't start school, we're not supposed to travel away from the area and the news gives the impression of being censored."

"What makes you think they're censoring the news? You just listed cities where the avian virus was reported. You also said that the vaccine had been distributed. I don't get it."

"You've seen news conferences where the media asks questions that go unanswered, haven't you? The White House spokesman says that that's under study, or that the information isn't available or simply that he'll get back to them with an answer. And then you have the case where he doesn't seem to hear a question no matter how many times it gets asked. They think they call it stonewalling and that clip of the news conference had the Rock of Gibraltar at the podium passing out information that didn't inform."

"Hmm. That's not right; this is a health crisis, not a biological attack."

"Right, Randy, that's why we got AVA and smallpox vaccine readily available. You can't believe that Doc bought that song and dance we put on for him can you? Who in his right mind would go to Southeast Asia when they were fighting the beginning of a flu pandemic? Horse hockey. Anyway, Doc called and said our lab machine was in."

"Did he say what he found us?"

"The machine will run a full standard trauma panel. He said if we could get in Monday when Paul and Marilyn go in for round 2, he'd have his lab technician demonstrate how to use it. I got the impression that the machine does most of the work. He also told me that if he had lab results he could treat a majority of what would come up here in the sticks over the phone."

"Oh right, we could if we had a portable X-Ray and someone who knew how to use it. Then all we'd need to be able to do is interpret the X-Ray film."

"Ever heard of a DynaRad Phantom?"

"No why?"

"Well... Doc said he found a very good used unit and it was buy it or lose it so he bought it. He went on to say that for now, we could use it up here in this area and once this crisis is passed, he'd take it back and use it in his office. He said he also got a used automatic developer."

"Did he say how much we owe him? Seven or ten years at hard labor?"

"He said that we'd get all the people in this part of the County, not that it's a lot. They will only transport or see them in town if we can't handle the problem with him over the phone."

"What makes him think we can handle something like that?"

"Ask him when you see him on Monday."

"If we're going to Lakin, we might just as well pick up our own meat and I'll pay for the processing. Could you switch over to Fox News? Our lives have been completely disorganized by this avian flu thing and as far as we know, it hasn't even reached western Kansas."

"The Opry isn't over until the fat lady sings, Randy. I just wish we'd had another year and could have taken the Paramedic training. If we have a lab machine, a portable X-Ray and the other things we already have, we equipped as well as Doc Williams office."

"I remember reading the international travel on all carriers to and from the United States for 2005 was around 137 million people. About 16 percent were on Pacific flights. US airlines handled about half the traffic. It was in that article about how the US was setting up 25 centers at major airports to quarantine passengers. We're talking about 22 million people in 2005 and who could guess what it might have been this year?"

"That bird flu has been spreading all over the world, most in wild birds, Randy. Quarantining airline passengers was too little, too late. You heard the Presidential announcement, and I told you what they've said on TV. All we can do is hunker down and hope it doesn't get to Kansas."

"It's probably already here, June. Kansas has 33 cities over 10,000 in population including 2 over 100,000, Wichita and Topeka. We have 105 counties with 628 cities. Almost 90% of the cities have populations under 3,000. The state, counties and cities don't have the resources to deal with an epidemic let alone a pandemic."

"And there's that other thing."

"What other thing?"

"What the government isn't saying and the fact that we've been vaccinated for everything they have a vaccine for that we know of. I once heard bioweapons and chemicals weapons described as the poor man's nuclear weapon. That article in the Washington Times about the radical Muslims a few years back suggested that the jihadists wouldn't be satisfied until they'd converted the entire world to the Muslim faith and they'd do whatever it took. What if they were counting on this flu outbreak to introduce some weaponized virus we have no defense for? That would explain why Doc suddenly had vaccines for almost everything."

"Almost?"

"Yes, don't you remember when they announced that The US Department of Defense (DOD) has announced plans to collaborate with the defense departments of Canada and the United Kingdom to develop a vaccine for plague, which would fill an empty slot in the nation's current vaccine arsenal? The three countries have been sharing information on plague vaccines since 2000, and the United States and the UK have been working separately to develop them since the 1990s. I think that was in April or May of 2005."

"I remember learning that. Y Pestis infection can cause the following clinical syndromes: bubonic plague, primary septicemic plague, primary pneumonic plague, plague meningitis, plague pharyngitis, pestis minor and subclinical infection. But I don't recall hearing that they had developed a new vaccine. I remember that the classic forms of plague are bubonic plague, septicemic plague, and pneumonic plague. Septicemic plague can be either primary or secondary to bubonic plague. Similarly, pneumonic plague can be either primary or secondary to septicemic plague or bubonic plague (i.e., following hematogenous spread). The best drug we have on hand to treat the plague is Cipro."

"Maybe we should get a prescription for Streptomycin, it's a preferred treatment."

"Sure, I'll call Doc and have him call in a prescription and we can have Paul pick it up when they go to town for their final shots."

"What are the likely candidates for bioterrorism weapons?"

"Probably anthrax, botulism, plague, smallpox, tularemia and viral hemorrhagic fever. June that covers a lot of ground. That 2004-2005 outbreak of Marburg in Angola was the worst outbreak ever with 227 of 252 infected people dying, 90%. I'll tell you one thing, if someone engineered a bioweapons and released it during an avian flu pandemic; this Country would be in real trouble."

"This Country? Randy, the whole world would be in trouble. The real problem with an engineered illness is that there isn't a widely available vaccine."

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## Historical Perspective

Use of biological agents as weapons of war has occurred throughout history. Notable examples include these:

- In 184 BC, Hannibal ordered that pots filled with serpents be thrown onto the decks of enemy ships.
- In 1346, the Tartar army catapulted bodies of plague victims into the city of Caffa.

- In 1763, the British army provided the Delaware Indians with blankets that had been used by smallpox patients.
- During World War I, the Germans used various human and animal pathogens as agents of germ warfare in Europe.
- During World War II, the Japanese used germ warfare against the Chinese and the Soviets.

Following World War II, several countries maintained biological weapons programs, including the United States, the Soviet Union, Canada, and the United Kingdom. However, the United States, Canada, and the United Kingdom all ended their programs by the early 1970s. In 1972, more than 140 countries signed the Biological and Toxin Weapons Convention, which called for termination of all offensive biological weapons research and development and destruction of existing biological weapons stocks.

Despite these positive events aimed at curtailing the availability of biological weapons, the Soviet Union continued to expand its biological weapons program throughout the 1980s and early 1990s. Key aspects of the program included the production of large amounts of smallpox virus and the development of mechanisms to weaponize it.

Eradication of naturally occurring smallpox and the cessation of routine vaccination against the disease in 1980 was seen by the Soviet Union as an opportunity to use smallpox virus as a biological weapon. Anthrax was another disease actively studied by the Soviet Union, as evidenced by the outbreak of inhalational anthrax that followed release of aerosolized anthrax from the Sverdlovsk bioweapons production facility in 1979. Seventy-seven cases of anthrax were identified and 66 of the patients died.

After the demise of the Soviet Union, many of the scientists who worked in the biological weapons program left the Country. The status of many of those scientists remains unknown; however, Iraq, Iran, Syria, Libya, and North Korea actively have recruited such experts. After the Gulf War, it became clear that Iraq had developed an extensive biological weapons program, predominantly involving anthrax and botulism toxin. Experts also are concerned that Iraq, and possibly North Korea, may have gained access to smallpox virus.

Because weaponized forms of certain biological agents have been developed, the threat of using such agents against civilian populations through bioterrorism attacks has emerged over the past few years. Bioterrorism, which had been largely a topic of speculation, became a serious reality for the United States in October 2001, when anthrax cases following exposure to contaminated mail occurred in New York, New Jersey, and Washington, DC.

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The first paramedic system was initiated in Miami, Florida in 1967-68 organized by Dr. Eugene Nagel and Dr. J. Miller MD. University of Miami Medical School held the first paramedic school at the University of Miami and called these graduates "Physician Ex-

tenders." By March 1967, these paramedics were transmitting heart rhythms to Jackson Memorial Hospital, with a unit that weighed a combined 54 pounds. Experimental programs soon began in Pittsburgh, Seattle, and Los Angeles, San Francisco and Jacksonville and several other cities followed the lead.

Nagel and his associates combined in a single unit, the electrical energy of the radio signal interfered with the modulator's ability to transform the millivolts of an EKG into an audible tone for radio transmission. Miami innovators worked with a small California manufacturer to develop a modulator with sufficient shielding and bypass capability. The Biocom modulator proved successful, and in March 1967, Miami's new "paramedics" began to routinely transmit EKG's to Jackson Memorial Hospital.

Dr. Michael Crawley and Dr. James Lewis commenced a pilot program in Los Angeles, California, at Harbor General Hospital. It consisted of eighteen firefighters, twelve from Los Angeles County Fire Department and six from Los Angeles City Fire Department.

There are basically 3 skill levels: EMT-Basic, EMT-Intermediate and EMT-Paramedic, but this may vary from state to state. At one time the Paramedics in Seattle, Washington had the highest training level of any of the US Paramedics and could administer drugs without permission from a doctor on the radio. That was a long time ago, so I can't say how it is today or how it will be when this story occurs in the latter part of the first decade of the 21st Century.

At this point in the Lakin, Kansas area, there isn't an outbreak of the flu. It's coming, but hadn't hit, yet. Apparently, reading between the lines, Doctor Williams had information that wasn't being widely shared, perhaps from the Department of Homeland Insecurity. It will later turn out that every trained 1st Responder and medical person in the area has been vaccinated for everything there's a vaccine for. The US used a vaccine for the plague during the Vietnam War, but its use was discontinued by 2000.

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"We don't have everything we need."

"What don't we have?"

"A Microscope and a box of comparison slides. It isn't that difficult to prepare a slide if we take a blood sample, but without a microscope and the comparison slides, we won't have any idea what we're looking at."

"I looked on the web and we can get the slides at a place in Elmira, New York, for ~\$1,000."

"What about a microscope?"

"We can get any kind of microscope we need from Mel Sobel in Hicksville, New York."

"That's nice, but you can't see a virus in a regular microscope."

"Doc sends his stuff to one of the Universities or Kansas City. It's not like we'll have many people here, June, there are only 5 people per square mile and there aren't more than 50 people altogether in the area Doc wants us to keep track of."

"Are you sure we want to spend the kind of money it will take for us to equip a clinic out here in the middle of nowhere? Randy, we're just a couple of EMT-Intermediate level techs. It doesn't make a lot of sense to build a laboratory, radiology and a clinic."

"It might if the time comes that no matter what, we don't dare go to town. You make me remember the joke about the guy who got bitten on the butt by a rattlesnake, 'You gon-na die!'"

"He only gave you 10 cards of Tamiflu and you just said we have 50 people under our care. I don't see the wisdom in that."

"Neither do I, but that's about right."

"I wonder if we can get more of the Tamiflu or more of the vaccine?"

"It makes more sense to dig out a few boxes of those N-95 masks and examination gloves and to pass them out to everyone in the area. As long as everyone stays isolated, we shouldn't have a problem. But you go right ahead and call Doc Williams and see if he has either."

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"Well?"

"The best he could do was 30 more cards of Tamiflu. That will leave us about 4 cards short. The 6 of us have all been vaccinated so that leaves 44 people to treat with it. Unless I flunked math  $10 + 30 = 40$  and 44 is 4 more than 40."

"And only the 6 of us have been vaccinated?"

"I asked and that's correct. He said we should count ourselves as lucky that we got that many."

"You are forgetting your suspicion that terrorists will take the opportunity to strike the US with a bioweapons."

"I don't think they'll stop with the United States; Europe has had a lot of trouble with militant Muslims over the past 3 years."

"Fine, 90% of the population of the world will die. It depends on what they choose as their bioweapons, but ideally it would be some disease that was spread via airborne contact, like primary pneumonic plague. That has an onset of 1-4 days so it could really spread rapidly. Can you imagine if they had something like that to contend with in addition to an outbreak of avian flu that was transmitted in an airborne fashion? This Country would be lucky if 100 million people survived."

"More like 30 million, Randy."

"Paul, this is Randy. Would you like to go with me and help to pass out exam gloves and N-95 masks?"

"When do you want to do that?"

"The sooner, the better. How about tomorrow?"

"Do you have enough?"

"There are 20 masks to the box and 8 boxes to the case. We have 10 cases of masks and nearly as many boxes of gloves. They had a clearance sale at a 99¢ store on the gloves. June and I ordered the masks in bulk. We can give every person in the area a box of masks and a box of gloves and have more than enough left over."

"What about vaccinating them or something?"

"Doc didn't have any more vaccine and he came up short on Tamiflu. I think our best bet is to persuade everyone to remain isolated until the pandemic passes."

"We haven't had our final shots yet."

"That only for the rabies. By the way, I need you to pick up a prescription at the pharmacy on Monday when you go to town for your final shots."

"What is it?"

"Streptomycin."

"I didn't even know they still prescribed that any more. What is it used to treat?"

"The plague."

"The what?"

"Bubonic and pneumonic plague."

"I didn't know we got the plague in the US anymore."

"We don't get a lot, but it still occurs. From 1947 through 1996, 390 cases of plague were reported to CDC and from 1990 through 1999, 89 cases of plague were reported to CDC with an average of 8.9 each year. I'll explain more when I see you tomorrow if you want to go along. A large outbreak of pneumonic plague was identified in early 2005 in the Democratic Republic of the Congo (DRC). Cases have occurred in workers of a diamond mine where about 7,000 people work under crowded conditions with poor sanitation. The first case occurred Dec 20, 2004, and as of Mar 15, 2005, 130 cases of suspected or probable plague with 57 deaths have been reported."

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"What is all of this plague crap about?"

"June and I were speculating that an outbreak of avian flu would be a perfect time for terrorists to introduce a bioweapons and one of the best would be the plague for 2 reasons:

1. Plague is a suitable pathogen for use as a biological weapon because:

- The organisms can be delivered in an aerosol form.
- Pneumonic plague causes a serious illness with a high case-fatality rate.
- Pneumonic plague is communicable, and large outbreaks have occurred in the past.
- A bioterrorist attack involving pneumonic plague would cause widespread fear and panic that would be difficult to contain, partly because of the communicable nature of the disease

2. Plague used as a bioterrorist weapon would be expected to have the following features:

- Previously healthy patients would present with a severe and rapidly progressive pneumonia.
- An acute multilobar pneumonia accompanied by hemoptysis, associated gastrointestinal symptoms, and a fulminant clinical course would be very suspicious for pneumonic plague.
- Many similar cases would present over several days.
- Illness onsets would generally occur 2 to 4 days after release, but could occur as soon as 1 day and up to 6 days later.
- Buboes characteristic of bubonic plague would not be present.
- Illness would likely occur in an urban area and patient would not have a history of recent travel to a plague-endemic region (i.e., southwestern United States).
- Patients would not necessarily have risk factors for plague exposure (eg, outdoor field work, veterinary work, recent outdoor recreational activity).
- There would be no indication of a prior recent plague epizootic with rodent deaths in the affected community."

"So what's with the Streptomycin?"

"It's the preferred treatment for the pneumonic plague. We already have Cipro, but Streptomycin is the preferred treatment. We got Doc to prescribe 200 doses of Streptomycin."

"Pills?"

"Shots, Streptomycin IM."

"Can everyone take it?"

"No they can't. You can't give it to expectant mothers and people over 60. That's why I think maybe we should increase our supply of Cipro once we had a list of the people who will be coming to us for medical concerns."

"I'll get Doc to prescribe some Cipro for us too. How many do you think?"

"If you had 160 units, you'd have enough for your entire family."

"That's expensive isn't it?"

"The pills are about like solid gold in cost. On second thought, maybe gold is cheaper."

"But none of these antibiotics will help with the flu, right?"

"Right, that's a virus. Pneumonic plague is a bacillus, .Y Pestis."

"Why do you think terrorists will use the pandemic as an opportunity to spread something like the pneumonic plague?"

## An Unlikely Outcome – Chapter 5

"I don't know, because they can?"

"I'd think just the opposite, people would already be guarding against the spread of contagion."

"There's that, Paul. But imagine what it would like to be in a hospital faced with two diseases that are respiratory diseases. We're talking about needing to differentiate each case."

"What did we end up with for people, I lost count?"

Including us, 54, 8 age 60 and over and 10 age 6 and under. The remaining 40 are in between. But two of the women are pregnant so they'll have to use Cipro too. That means we should probably have a total of 640 units of Cipro and enough Streptomycin IM for 48 people. We only have 6 of us protected against the avian flu and a total of 40 cards of Tamiflu. That puts us 10 short in that department."

"How much does Cipro cost?"

"100 brand name 500mg units are \$280, while 400 generic 500mg units are only \$95 if I order from Pharmacy RX World; but, in normal times its only \$50 per card."

"Never heard of them."

"They're in Winnipeg, Canada."

"God that means that in the United States..."

"John D. Rockefeller would have to get a loan to buy 640 units."

"At least you had enough gloves and masks."

"80 boxes of each, leaving us 32 boxes of each among 6 people."

"Which is what?"

"160 masks apiece and 266 pairs of gloves each."

"Oh, that's not as much as I thought."

"We'll have to see what we can pick up in town. Do you feel like riding in now?"

"Today?"

"Right now!"

"I think maybe we'd better, Randy. You'll want to talk to Doc about the Streptomycin IM for 48 people and we'll need to get June to order the Cipro immediately."

"June, do you have your ears on?"

"What do you need?"

"A total of 640 doses of generic Cipro less any that we have on hand."

"Roger, I'll call Doc."

"Tell him we need enough Streptomycin IM for 48 people."

"Roger. Are you going straight to Lakin?"

"Affirmative, we passed out 48 boxes of gloves and masks."

"You'll have to go to Wally World in Garden City to get more masks and gloves."

"Affirmative."

"Where did you buy the masks?"

I got them from a place in San Diego. They probably still have some but I doubt we could get them now."

"What about getting Tamiflu from them?"

"\$185 per card of 10 tablets."

"Forget I asked."

"It's cheaper if you buy 3 cards, only \$520."

"You can still forget I asked."

"All is not lost; I found a place on the Internet that claims they'll sell members the product for \$42 a card."

"Right and after you join they're out of stock?"

"I'd imagine that would be the case, yes."

"Do they have a number we could call?"

"Yes, do you want to see if we can pick up the missing 10 cards?"

"If we can get it for \$42 a card, we should get all they'll sell us. If I recall, it's good for any variety of flu, right?"

"Absolutely."

"How does it work?"

"Tamiflu (oseltamivir phosphate) is a neuraminidase inhibitor. These inhibitors treat the cause of influenza infection by inhibiting the critical neuraminidase protein on the surface of the virus. As the flu multiplies, neuraminidase enables it to move on and infect other host cells. When you inhibit neuraminidase, the flu can't escape from its host cell, which prevents it from spreading. It can be taken by anyone 1 year old and up."

"You have 40 doses, why not get another 14? That will give us one card per person and 6 spares."

"If she can get them to ship it, fine. Call her on your cell phone and tell her that. Remind me to write the Prime Minister of Canada and thank him for subsidizing the cost of our drugs."

"I should warn you about Streptomycin. You can't take it and Cipro at the same time. Let's just say that its contra indicated because of drug interactions."

"Define indication, contraindication and precaution, if you can."

"Indications say what conditions the drug treats, contraindications are when a treatment would involve a greater than normal risk to the patient's condition and is therefore not recommended. A precaution generally defines groups who should use a drug. Then a person has to consider drug interactions. The pneumonic plague is probably more dangerous than the avian flu, but at least it's highly treatable."

"There is some question as to the effectiveness of those N-95 masks. We'd better look for several gallon bottles of antibacterial soap and some of those instant hand cleaners. They're mostly just alcohol, but the good ones kill 99% of the germs. The best approach is to use the antibacterial soap followed by the hand sanitizer. We'll have to wear eye shields when we're dealing with anyone who might be infected. And remind June or me to show you how to remove the exam gloves after you've worn them, it's essential that you remove them without coming in contact with the outside of the glove."

"And you're willing to invest the money in creating what amounts to a well-stocked clinic out here in the boonies?"

"Doc has the biggest investment but if he thinks it's that important, June and I are willing

to do our part. I ordered a fancy microscope and a box of comparative slides from New York. If anything bacterial gets us we'll be able to tell what it is. You can't see a virus in a regular microscope; that requires an electron microscope and there isn't one anywhere near here. If she gets enough Tamiflu and Cipro, we'll be able to treat everyone in our area."

"You're making some assumptions."

"Of course we are. Pneumonic plague would be one of the easiest diseases to transmit. It doesn't matter though, Paul, the key to everything is isolation."

"What are we going to do if the phones go down?"

"I hadn't thought of that, any suggestions?"

"It would be easiest to establish a CB radio net. I'd guess that more than half of the families have an old CB lying around. We could use the emergency channel and maybe channel 15 for regular communications."

"Let's look around while we're in town and see if we can find any working used radios and antennas. We can distribute them when we distribute the Tamiflu."

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"Hey fellas, not your regular day to be in town."

"We came to pick up some prescriptions Deputy. We thought we'd make a run over to Garden City if we could."

"I'd advise against that fellas. There's an outbreak of flu like symptoms in Garden City. The Sheriff said that Doc thinks it's just the regular flu, but they've got the town locked down tight."

"Ok, but we'd better find a pay phone and call home."

"June, what about the Tamiflu and the Cipro? FedEx will be fine. What did Doc say about the Streptomycin IM? Really, why the hospital pharmacy?"

"What did she say?"

"She ordered the drugs from Canada and they'll ship them by Federal Express. Doc told her that the only large supply of Streptomycin IM was in the hospital pharmacy. We have to go by there and pick it up. He also told her that the lab equipment had left Denver and was on the way here. We'll have to pick up supplies for the X-Ray machine and the blood analyzer. June and I have to come back to the hospital tomorrow to meet with a Radiologist and be trained to use the X-Ray machine. Then we have a session in the

lab to learn how to use the blood analyzer."

"How are you going to handle the comparative analysis with the microscope?"

"It comes with a book that has plates of all the slides. We can locate a match in the book and then compare the slides. I'll give the book to Doc and he can note the treatment options. Then when we get something we can call him on the phone or Fire Department radio and see what he wants to do. He issued the prescriptions for every drug we have so he has a pretty good idea what our capabilities are. I don't know how many go teams the CDC has but if we get an avian flu pandemic and June and I have guessed right about the terrorists, they won't have enough."

"That's bad about Garden City, huh?"

"I'd say so, the population is around 30,000. That's going to impact the hospital; most of the doctors come from Garden City. The lab has limited lab services so their reference lab testing required is done at St. Catherine's Hospital in Garden City or LabCorp in Wichita. They have a primary surgery with a backup and a primary ER and 2 backups. If we get much of a problem here in Lakin, they'll be overwhelmed."

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As the name suggests, the county owns Kearny County Hospital. With its 26-licensed acute care beds, the hospital shares a campus with a county-owned nursing home that has 40 long-term care beds and 25 assisted living beds. The hospital offers radiology, laboratory, physical therapy, in- and out-patient surgery, low risk obstetrics and 24-hour emergency room services, in addition to acute care and long-term care in swing beds. The hospital is also served by mobile technologies – ultrasound, mammography, osteoporosis screening, and CT. Most people in Kearny County who need prescriptions end up in Garden City; Lakin has a single Pharmacy, J & J Pharmacy at 500 East Thorpe Street. According to a 1998 survey, the single greatest health risk in Kearny County comes from people not wearing their seatbelts.

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The thin yellow and red line...

My doctor sent me to the emergency room for IV antibiotics on Wednesday. The best I can recollect of it tells me he was quite alarmed. In the time it took me to drive myself across 86th Street from his office to the ER, my temperature rose from 101.3 to 102.8 – if only my Microsoft stock had been so bullish.

Before I actually got to the emergency room, the nurse at the triage station noticed immediately that he and I shared the same birthday. I didn't have the energy to acknowledge this marvelous observation. Oddly, the nurse-astrologer did not notice that my right ear was approaching the size of a small zeppelin. Nevertheless, he sent me on

down the line. "Follow the yellow and red dotted line" were his parting graphing instructions.

Paper-pushers at the emergency room quizzed me about my license to operate a zeppelin and gave me Motrin – my temperature took a market correction to 101. Eventually, I was directed to "Express Care". Presumably this was because I was attempting to be checked out for "No More Than" twelve zeppelins. In the Express line – err – Care room, everyone was named Kathy. A woman who had no name – but who spoke the unspeakable question – observed that we shared the same birthday. I answered that I did have insurance but not yet an insurance card. I drifted off on my hospital bed. The birthdays, I puzzled. Perhaps a massive government experiment in cloning ...

A nice resident who will never be mistaken for Abby on "ER" took my history. "That looks like it really hurts" she empathized. "Very observant, fraulein!" yelled one of the passengers on my zeppelin. "You might need iv antibiotics," suggested the resident, thus assuring her capture of the 2002 Nobel in Medicine and Physiology and Stating the Obvious. "Farfegnuggen", yelled another passenger. Not-Abby left to confer with the attending, I drifted off again.

"We're gonna gitja better" twanged the attending physician who must have graduated magna cum laude from Soothing-Airline-Pilot-Voice training school. "You think you mighta been stung by a bee?" asked the honors voice. "Not that I can recall", I murmured. What day was this guy born, I wondered? "Kathy'll gitja set up with an IV and then Kathy'll gitja admitted" continued the voice from the cockpit. The stewardess cleanly inserted the earplugs into my right hand vein. The 'fasten seatbelt' sign was turned on; I leaned back and drifted off again in my aisle seat in Business class.

"Room 409, Orthopedics floor", squawked the control tower to the copilot manning my wheelchair. Some people "hit the ground running" and some people "keep their ear to the ground". This choice of floor had apparently been made so that I could "Hit the ground – with my ear running to it". The aide escorted me to my room. The bed was equipped with its own elaborate swing set of pulleys and monkey bars. Perhaps IV antibiotics required that my ear be in traction?

"Hello, I'm Sara and I'll be your nurse. Deep breath." "Hello, I'm Mary and I'll be your nurse. Say Ah." "Hello, I'm Miriam and I'll be your nurse. Squeeze hard." "Hello, I'm Rae and I'll be your nurse. Swallow." "Hello, I'm Beth and I'll be your nurse. When was the last time you...?" "Hello, I'm Suzanne and I'll be your nurse. Eat." It was Thursday morning. Thanks to an overnight sell off, the market had dipped to 98.6. I was feeling better – briefly. My first phone call of the morning was from the business office of the hospital. Had I forgotten to give someone my insurance card when I went to the emergency room? "No" I explained, "I didn't have a card yet. I just started a new job. But the benefits are retroactive to my hire date." "Oh" they responded unbelievably. "We'll send a case-worker 'round to see you."

And then there was still the matter of my ear. My enlarged earlobe was resting on my

shoulder – and any good wind gust might turn me into a UFO (Unidentified Flying Otitis). Luckily, I was still tethered to the ever-present IV pole. I remained earthbound.

The infectious disease expert was called in. Perhaps a deadly outbreak of Ear-bola? Legion-ears? "So Mr. M—, you're a pretty healthy guy", intoned the expert, supremely confident. "Tell me, how many times a week do you swim?" asked Holmes sans the push-me-pull-you hat. "Three." I answered astonished, "But how did you know? I'm sure I told no one." (OK. Allow me this one embellishment.) "Elementary my dear M—. The pattern of clip-clip-clops in  $\frac{3}{4}$  time outside my window. The footprint of a Sasquatch headed west – not east – in the bog. The shreds of fluorescent clothing snared on beech plum vines along the road into town. The fact that I've seen this in swimmers before..." "I'm changing your antibiotic. You should be fine in 4 or 5 days." 4 or 5 days!?

On Friday morning they served me bacon and eggs. I was sure I had answered the lady-with-no-name's question about my religious preference. "Religious preference"? Actually, I think the Baptists have the best music and the Catholics are clearly number one when it comes to art. I'd have to pick the Mormons for best record keeping and, of course, the Rastafarians are my choice for their creative use of paraphernalia. But I am Jewish and I don't eat pork. Perhaps I misunderstood the question. Lunch contained a piece of hermetically sealed Wonder Bread. The package markings indicated that Annette Funicello and Frankie Avalon had placed the slice in its airtight package, personally. The chicken tetrazini came without pork. I can't be certain but I think the tetrazini had been removed as well.

Holmes returned on Friday, his swagger even more pronounced. "So M—, I see from that old shoe attached to the side of your head that I have indeed solved the case of the Red-Headed Lobe. I'm sending you home with 5 days' worth of IV antibiotic. Come see me in my Baker street office next Tuesday. Come Watson."

They sent me home on Friday night. The caseworker had gotten through to my new health insurance company and everything was peachy. Now my wife injects me with antibiotic twice a day. I figure as long as I'm nice to her and don't receive my new life insurance card, there's little danger of her spiking the syringes with lighter fluid. I miss the electric-koolaid orange jello with white frosting but life is good. – Evan Morris

Mr. Morris, it was kosher bacon, what can I say? Maybe you'd rather have had grits? The point of the story, to me, is that sooner or later you'll find someone who can tell by looking what is probably wrong with you. When you go to a doctor, you can't see the gears grinding in his head as he eliminates things. I could be totally incorrect, but I think that the process of diagnosis is mainly the process of elimination. And when they only have one or two things left, they do tests. A differential diagnosis is the clinical evaluation of possible causes of dementia to rule out all other factors before settling on whatever is ailing you. Example:

The patient presents with symptoms A and B. The physician creates a list of diseases that include symptoms A and B. There are three diseases that feature both symptoms:

Disease 1: A, B, C  
Disease 2: A, B, C, D  
Disease 3: A, B, E

The physician can test for the presence of symptom C. This would either support 1 and 2 or support 3. If the client tested positive for C, a test for D could be used to differentiate between disease 1 and 2. If the client tested negative for C, a test for E would confirm the diagnosis of disease 3.

In modern medicine, physicians typically decide to perform tests based on weighing the likelihood of a positive result against the severity of the disease if it were to remain undiagnosed. For example, if an 18 year old with no personal or family history of heart disease complains of chest pain, the physician is much less likely to be concerned that a heart attack occurred than he/she would be if the patient were 65 years old.

The method of differential diagnosis was first suggested for use in the diagnosis of mental disorders by Emil Kraepelin. It is more systematic than the old-fashioned method of diagnosis by gestalt (impression).

The physician uses the plastic model of observation, hypothesis, and testing. The observations the physician uses for his hypothesis are pertinent facts about the patient such as symptoms, and personal and family history. The physician then proposes possible diseases, which serve as his hypothesis. Utilizing his knowledge of the disease, he does testing in order to differentiate the diseases. Differential diagnosis is a dynamic process used to determine the diseases suggested by the symptoms the patient is presenting, listing the most likely causes, and using appropriate testing to include or exclude some of the possible causes. The new information gained from directed testing is used to narrow the possible afflictions, and as a guide for more testing. Once a physician is satisfied with a cause of the disease, he prescribes a therapy. A lack of improvement during prescribed therapy for the working diagnosis necessitates reassessment, especially when this therapy has been empirical.

But all of you smart folks knew that already, right? Me? "I see NOTHING! I know NOTHING!"

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The H5N1 virus is one of 16 different known subtypes of avian influenza (bird flu) viruses. All influenza viruses (human and avian) are of significant concern to health officials because of their ability to mutate rapidly and their propensity for acquiring genes from viruses that infect other animal species. Some H5N1 viruses are highly pathogenic, meaning they can cause severe disease and death in humans.

H5N1 viruses have been found in birds around the world. As the spread of H5N1 infection among birds' increases, so, too, does the opportunity for H5N1 to be transmitted

directly from birds to humans. Recently, human H5N1 infection has occurred in Cambodia, Thailand, and Vietnam during large H5N1 outbreaks among poultry, causing great concern among health officials. H5N1 is a type A virus affecting birds, as is H1N1, which affects swine.

If cases of human infections increase, people simultaneously infected with human and avian influenza strains could become a "mixing vessel" for the disease. The result could be the emergence of a lethal H5N1 influenza virus that is easily transmitted from person to person. Such an easily transmissible virus could trigger a worldwide influenza pandemic.

Both Sanofi Pasteur (Swiftwater, PA) and Chiron (Emeryville, CA) are developing vaccines to be tested in NIAID-conducted clinical trials. Under these contracts, Sanofi Pasteur has delivered more than 8,000 doses to NIAID and Chiron will produce 10,000 doses.

The H5N1 "seed strain" (the strain used to produce the trial vaccines) was developed by researchers at St. Jude Children's Research Hospital, Memphis, TN, using a technique known as reverse genetics. NIAID provided this H5N1 reference virus to Sanofi Pasteur and Chiron in spring 2004 for vaccine production.

We know that flu viruses change over time. However, in response to the increasing number of H5 cases reported in early 2004, public health officials deemed it critical to move ahead quickly and select one of the available human H5 viruses for vaccine production. If a distinct H5N1 virus should suddenly emerge, an additional new vaccine against that strain may be needed. Ultimately, the experience gained by manufacturers in preparing the current vaccine should make us better prepared for the next time.

This is a follow-up to DMID 04-063, which enrolled approximately 450 subjects over a 2- to 3-month period at three study sites. Subjects were stratified by age and history of prior influenza vaccination for the 2004-2005 flu season, and randomly assigned to receive 2 doses of saline placebo (N=50) or 7.5, 15, 45, or 90 mcg of the influenza A/H5N1 virus vaccine (N=100/dose group) by IM injection. In the proposed study, each of these subjects (except for placebo recipients) will be asked to receive a third dose of vaccine, at the same dose level originally administered (i.e., those subjects originally receiving two doses of 7.5 mcg will receive a single booster dose of 7.5 mcg, those receiving two doses of 15 mcg will receive a single booster of 15 mcg, etc.). The booster vaccine will be administered at the time of the 6-month and final visit in study 04-063, or approximately 5 months after the second dose. Subjects will return to the clinic 28 (+/- 3) days after vaccination for assessment of AEs and concomitant medications, targeted physical examination (if indicated), review of the memory aid, and blood sample collection. At approximately Day 180 (6 months after booster vaccination), subjects will return to the clinic for a final immunogenicity blood sample collection and for follow-up (which includes a targeted physical examination [if indicated]). The duration of the study treatment for each subject will be about 6 months.

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"Really, 16 subtypes?"

"Yes, let's just hope that the flu doesn't mutate again. A Japanese farm is expected to cull most of its 25,000 chickens to prevent the spread of a highly pathogenic avian influenza, identified as A H5N2 that has killed about 800 chickens."

"Is that dangerous too?"

"The H5N2 strain has not been known to cause any human illness cases, unlike H5N1, which has infected more than 10,000 people and killed 5,400 in Southeast Asia since late 2003."

Influenza A viruses get their names from two sets of protein spikes that jut from the outer surface of the virus. The haemagglutinin, or HA, spike governs virus binding and entry into cells, where copies of the virus are produced. There are 15 HA subtypes, designated H1 to H15. Immunity to an HA subtype – whether conferred by vaccination or previous exposure to that subtype – protects against infection, but only for that subtype.

The neuraminidase, or NA, spike governs the release of newly formed virus from infected cells into the host's body. There are 9 NA subtypes, designated N1 to N9. Immunity to an NA subtype reduces the amount of virus released from a cell, resulting in less severe disease.

All 15 HA subtypes and 9 NA subtypes have been detected in free-flying birds. They provide a huge – and highly mobile – pool of genetic diversity.

## An Unlikely Outcome – Chapter 6

March 8, 2006 – Scientists have now verified through gene sequencing that the H5N1 virus has been rapidly mutating and evolving towards a strain that will be deadly for humans. Six months ago scientists estimated that the H5N1 virus needed to make about five changes to its gene structure for it to be deadly for humans. Now it requires only one last change.

The present strains of avian influenza (bird flu) are mainly infecting only birds, with only a relatively small number of humans being infected. The reason for the drastic preparations now being made by most countries in the world to protect themselves from this virus is that the H5N1 virus still has a very high mortality rate. It can kill up to 100% of domestic chickens and at present can kill an alarming 55% of people that become infected. If a pandemic occurs from a virus with even one quarter of this mortality rate then the world consequences will be horrendous.

From the World Health Organization statistics only 190 people have been infected since 2003 with the H5N1 virus and of these 92 have died. Most of these people had some direct contact with infected chickens of some kind. Some inefficient human to human transmission has also occurred in some cases.

It appears that it is inevitable that a bird flu pandemic will eventually occur. Some scientists expect that the last genetic change needed for efficient human to human transmission by the H5N1 virus may occur when migrating birds carrying the H5N1 virus begin their return journey in Spring. (Northern hemisphere). This means that there is a possibility that a pandemic could occur within two months.

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An individual virus strain is identified by the subtypes of HA and NA protein spikes on its surface. It is named by the letters H and N, each followed by the number of the subtype. For pandemics, a novel HA subtype is decisive, as it determines population susceptibility. To date, only subtypes H1, H2, and H3 are known to have circulated in humans for at least a century. As a virus from the H5 subtype will be foreign to the immune system of everyone alive today, vulnerability to an H5N1-like pandemic virus would be universal.

"And, that's why Tamiflu works; it inhibits the release of the neuraminidase."

"So you can get the H5N1 but it won't spread throughout your body?"

"Something like that, Paul."

"In that case, I think we should be more concerned about your hypothesis concerning a bioweapon."

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*Heartbreak Ridge* is a narrow, rocky, mountain mass running north and 3 south with HILLS 931, 894, and 851 dominating the MUNDUNG-NI and SATAE-RI Valleys. The south and east slopes were extremely steep. From these slopes the "Punchbowl" and HILL 1179 could be seen in the distance. Both prominent objectives had already fallen into our hands. Initially heavy vegetation covered the slopes of Heartbreak Ridge but air strikes and artillery destroyed all individual concealment. In each valley bordering the ridge were two important roads and streambeds. The roads were secondary class routes, but a road capable of moving military equipment was built in a short time. Also, a twisting, boulder-strewn streambed in each valley furnished an approach for tanks. Narrow gorges and deep defiles presented difficult engineering problems, which were overcome during the engagement. Enemy bunkers guarded the key ridges of approach. Due to a moderate slope to the west and north, the enemy supplies were moved up in positions with a minimum amount of labor.

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Clint Eastwood might have won the Congressional Medal of Honor at Heartbreak Ridge, but Gunny Highway sure didn't. It is possible that the movie was referring to SFC Tony K. Burris. The Citation read:

Sfc. Burris, a member of Company L, distinguished himself by conspicuous gallantry and outstanding courage above and beyond the call of duty. On 8 October, when his company encountered intense fire from an entrenched hostile force, Sfc. Burris charged forward alone, throwing grenades into the position and destroying approximately 15 of the enemy. On the following day, spearheading a renewed assault on enemy positions on the next ridge, he was wounded by machinegun fire but continued the assault, reaching the crest of the ridge ahead of his unit and sustaining a second wound. Calling for a 57mm. recoilless rifle team, he deliberately exposed himself to draw hostile fire and reveal the enemy position. The enemy machinegun emplacement was destroyed. The company then moved forward and prepared to assault other positions on the ridge-line. Sfc. Burris, refusing evacuation and submitting only to emergency treatment, joined the unit in its renewed attack but fire from hostile emplacement halted the advance. Sfc. Burris rose to his feet, charged forward and destroyed the first emplacement with its heavy machinegun and crew of 6 men. Moving out to the next emplacement, and throwing his last grenade, which destroyed this position, he fell mortally wounded by enemy fire. Inspired by his consummate gallantry, his comrades renewed a spirited assault which overran enemy positions and secured Hill 605, a strategic position in the battle for "Heartbreak Ridge," Sfc. Burris' indomitable fighting spirit, outstanding heroism, and gallant self-sacrifice reflect the highest glory upon himself, the infantry and the US Army."

During the Korean Police Action, 132 CMH were awarded and 94 Medals of Honor were presented Posthumously. The Citation for the only CMH presented during the War on Terror up to this writing, reads as follows:

Sergeant First Class Paul R. Smith distinguished himself by acts of gallantry and intrepidity above and beyond the call of duty in action with an armed enemy near Baghdad International Airport, Baghdad, Iraq on 4 April 2003. On that day, Sergeant First Class Smith was engaged in the construction of a prisoner of war holding area when his Task Force was violently attacked by a company-sized enemy force. Realizing the vulnerability of over 100 fellow soldiers, Sergeant First Class Smith quickly organized a hasty defense consisting of two platoons of soldiers, one Bradley Fighting Vehicle and three armored personnel carriers. As the fight developed, Sergeant First Class Smith braved hostile enemy fire to personally engage the enemy with hand grenades and anti-tank weapons, and organized the evacuation of three wounded soldiers from an armored personnel carrier struck by a rocket propelled grenade and a 60mm mortar round. Fearing the enemy would overrun their defenses, Sergeant First Class Smith moved under withering enemy fire to man a .50 caliber machine gun mounted on a damaged armored personnel carrier. In total disregard for his own life, he maintained his exposed position in order to engage the attacking enemy force. During this action, he was mortally wounded. His courageous actions helped defeat the enemy attack, and resulted in as many as 50 enemy soldiers killed, while allowing the safe withdrawal of numerous wounded soldiers. Sergeant First Class Smith's extraordinary heroism and uncommon valor are in keeping with the highest traditions of the military service and reflect great credit upon himself, the Third Infantry Division "Rock of the Marne," and the United States Army.

Previously, the CMH had been awarded in Somalia, Posthumously.

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Will any soldiers get a CMH for maintaining law and order during a pandemic that sets the stage for a bioterrorism attack? Probably not, the Medal is hard to earn. Out in western Kansas, it almost appeared that the avian flu wouldn't get there. The outbreak in Garden City was the regular flu and at this point very few people realized that there were 2 organisms running around loose. June and Randy were guessing. They were right, but it was just a lucky guess. The clearest distinguishing symptom was the level of fever because a virus produces a much lower fever than a bacterium.

And Randy and June had no empirical evidence to support their contention that there was an outbreak of pneumonic plague. As soon as a physician hypothesized that he had a case of pneumonic plague and not another case of avian flu, the CDC sent another team from the NIH to investigate. You've undoubtedly seen the space suits the CDC and NIH investigators wear in the presence of an extremely virulent illness. Both H5N1 and pneumonic plague required isolation. There the difference ended. When in a period of 24 hours, the emergency rooms were overwhelmed with people with high fevers, the CDC notified the White House that the Country would require a full quarantine.

In the United States in 2008, the shortage of hospital beds was already acute. And then came first the pandemic scare and next the suspicion that a bioweapon had been released. An engineered bioweapon wouldn't respond to normal treatment routines but

this plague did. The situation in the US had more curves than a mountain road.

*My Fellow Americans,*

*The Centers for Disease Control have identified multiple cases of pneumonic plague present in several major US cities. You can get additional information on this disease at the CDC website. Effective immediately, a full quarantine is in effect. Those of you who acquired rolls of plastic and duct tape in response to the Anthrax scare in 2002 can use those materials to seal your homes and reduce the infiltration of the plague.*

*According to doctors from the CDC, the initial distinguishing feature separating the plague and the avian flu is the intensity of the fever. Virus attacks tend to produce a fever in the 101° range while the plague is a bacterium and produces a higher fever on the order of 103°. This strain of pneumonic plague has responded well to conventional treatment, which includes Streptomycin and Cipro. Existing supplies of H5N1 vaccine had been distributed. However, your government still has secured enough doses of Tamiflu to treat up to 40 million people.*

*As far back as 2005 when I first announced my \$7 billion plan to respond to the avian flu threat, there have been shortages of Tamiflu and widespread examples of price gouging.*

*As recently as 2006, I requested and the Food and Drug Administration granted a waiver to produce vaccines using an experimental procedure that reduces the vaccine production time for 5 months to 3. Two companies with facilities in the United States are producing the avian flu vaccine and supplies are available for youth and our seniors.*

*Notwithstanding the availability of the H5N1 vaccine, a nationwide quarantine is now in effect because of the influenza and the biological attack. Transportation of essential food and medical supplies will occur with a military escort by drivers who have received the flu vaccine. It is our intention to have the situation well in hand to permit a timely election in November.*

*One final word on this matter, the spread of the pneumonic plague is not limited to the United States but includes several European countries. The avian flu epidemic has now reached pandemic proportions and the United States is working with the World Health Organization to supply such vaccines and medical supplies as may become available. However, until such time as the entire Country has either the vaccine or one of the other prescription flu products, none will be made avail to any other Country.*

*Laura and I ask all involved to follow the lead of local health and law enforcement authorities in dealing with the present crisis.*

*"God bless America.*

*"Crap. I reckon that eliminates the speculation. Has the FedEx shipment arrived yet?"*

"It is due in tomorrow. I said to hell with it and got 2 400-unit bottles of generic Cipro and 16 cards of Tamiflu. You picked up the Streptomycin at the hospital so the only thing we have left to do in Lakin is to pick up the smoked meats from the Locker plant and for the Johnson's to get their final shots."

"Are you certain we'll get the FedEx delivery?"

"It was guaranteed delivery, I would assume so. You realize that a FedEx shipment takes a day to go through customs and an extra day out here in the sticks, don't you?"

"So it won't be here tomorrow, but Monday?"

"Right. That should be soon enough, we already have some Cipro, Tamiflu and the Streptomycin. We should also receive the microscope and slides tomorrow. We have to get the instruction on the new equipment and we'll be ready to go. How would you feel about turning the second floor into an offsite hospital?"

"Who is going to be here to take delivery of the things we ordered from New York?"

"Marilyn is bringing Susan over."

"I really don't like the idea of leaving a teenager here alone."

"Expecting a sudden crime wave, are we?"

"You heard the announcement, June. I'll bet that spooked a lot of people. I'll tell you one thing, I carrying from now on and the law be damned."

"Carry open and you'll be ok, Randy. I'll call Marilyn and suggest that she stay with Susan. I'll explain your concerns."

"She probably thinks I've gone over the edge. You didn't answer my question about an offsite hospital."

"Maybe in a critical situation, but I believe we'd be better off leaving everyone at home and going to them."

"Make house calls?"

"Beats dragging a dangerous illness into our home."

"Phone. I'll get it. Hello? Oh, hi Doc what's up? You don't say, in Garden City? How many cases? You're sure it's the flu and not pneumonic plague? Of course you know the difference, but June and I have been concerned that this would be an opportune moment for terrorists to strike the Country with a bioweapon and we focused on the

pneumonic plague, didn't you catch the President's address? He confirmed a bioweapon attack using pneumonic plague. Yes that's why we purchased all of the Cipro and Streptomycin. No, the Tamiflu and Cipro won't be here for a couple of days, but we already have the Streptomycin, 40 cards of Tamiflu and 200 units of Cipro. June bought 16 cards of Tamiflu and 800 units of Cipro. Totals? 1,000 500mg units of Cipro and 56 cards of Tamiflu plus you vaccinated 6 of us. Enough IV Streptomycin for 48 people. We did a survey and we have 54 people including 2 expectant women, 8 age 60 and over and 10 age 6 and under. No, no infants. I used information on the Internet to select the drugs. They will? Good. We'll be in town tomorrow for instruction on the lab machine and that portable X-Ray. Yes, see you then."

"What was that about?"

"There are some better choices than Streptomycin, but he said it would work. Apparently the avian flu has surfaced in Garden City."

"I hope everything arrives in time, I paid overnight shipping on everything, Randy."

"It should. Anyway he said that they were dispensing Tamiflu because they were out of the vaccine. That should at least reduce the number of deaths. The only problem is that people wait too long and then the Tamiflu can't do its job. We need to call everyone and tell him or her to maintain the quarantine. Maybe you could do that. Explain that the drugs we ordered will be available in a couple of days. Doc said that there is also Relenza, which is inhaled. It covers both type A and B flu, but is approved only for treating uncomplicated influenza virus infection in people 7 years of age. Tamiflu also covers both type A and B flu, but is the only one that does that and is approved for treating an uncomplicated flu virus infection in those one year of age and older. I know that's the recommendation, but I read that Tamiflu is safe for anyone age 1 and up. The age restriction has to do with using it as a prophylactic."

"How many cases of H5N1 were there in Garden City?"

"Seven confirmed cases."

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Instead of calling everyone, Randy and June took their existing 40 cards of Tamiflu and passed them out to the neighbors who were furthest from their farm. They told the others that their supply of additional meds would arrive in a couple of days and they would bring them around when they did. This was the first of many laws/rules they would break in the coming months. The following morning Marilyn and Susan came by and they headed to Lakin for their training on the blood analyzer and the portable X-Ray machine.

When they arrived home, their new microscope and the sets of slides had arrived. They had also picked up some other things to dispense among the neighbors, multi-vitamins

and bottles of vitamin C. They intended to pass these things out when they distributed the remaining Tamiflu. Recent research had shown that if you dressed properly for the weather and maintained your body in peak condition, it was more difficult for a cold or the flu to get started in the first place. One fellow in England had even cured himself of HIV using only a health regimen. In another test, scientists with the Department of Health or whatever the English call their Medical Programs demonstrated that preventing you from taking a chill could prevent a cold.

"What do you think, can we operate the equipment?"

"They went over everything several times, gave us exposure charts and if push comes to shove, Randy, I suppose we could read the instruction that came with the machines. Hey there's FedEx, do you suppose our meds arrived?"

"The charge cleared the bank on our debit cards so I certainly hope so."

"Not a very big package, is it?"

"Is it all there?"

"Yes, let's hop in the pickup and deliver the Tamiflu and the vitamins."

Some of the neighbors insisted on reimbursing them for the Tamiflu and vitamins that they bought out of their own pocket. That certainly helped; they had drained their checking account to a couple of thousand dollars. While they were at it, they gave Paul and family the same as the others, arguing an ounce of prevent was worth a pound of cure. Paul had purchased a used radio capable of using the same frequencies as that Fire Department radio. He also had a scanner connected to a Diamond D-130J.

During the late fall and winter of 2008-2009, the Country was contending with the normal flu season, H5N1 and pneumonic plague. (Bad things happen in 3s) The same three illnesses were affecting Europe. No one had tracked down who had introduced the pneumonic plague and while the CDC attempted to backtrack incoming flights, they met with little success. The voter turnout in November was the lightest in recent memory and the Democrats still gained the House, Senate and the White House. The division in both houses of Congress was so close the Democrats barely had a majority. On January 20, 2009, Obama and Biden were sworn in and Bush and Cheney headed to Crawford, Texas.

In some respects, it didn't matter, the wars in Afghanistan and Iraq were over and no one was certain who had won. The United Kingdom had pulled its troops from Iraq by January of 2007 and the United States was totally out a year later. It now seemed obvious that the US had failed to win the War on Terror. In a guerilla war, only the guerillas win; ask the French, they had learned the lesson twice, Vietnam and Algeria.

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Despite the travel restrictions, the 3 diseases spread. In western Kansas, most everything came later and it wasn't until March of 2009 that the first case of pneumonic plague was diagnosed in Garden City. As of that time Lakin had avoided the H5N1 and the pneumonic plague. Access to Lakin was blocked on the east by a roadblock on US 400 and on the west by a semi tractor-trailer rig pulled across the highway. They also had south Kansas 25 blocked but only a lone Deputy protected north 25.

Had healthcare in the United States eroded to the point that EMTs were doing Paramedic duties and Paramedics serving as physicians? It isn't reasonable to say it can't be done, in the Kashmir in 2005 after the Pakistani earthquake 13 volunteers from New York City, Paramedics, were the only medical treatment available in the entire region. The avian flu, H5N1 had started in Southeast Asia. As a consequence it also ended first in that area and in May of 2009, the Chinese attacked Taiwan.

"Did you catch the news, the Chinese are attacking Taiwan?"

"I heard Randy, but President Obama said he wasn't sending the Navy."

"I heard that too, but I don't understand. There is the 1954 US-ROC defense treaty and the Taiwan Relations Act, which Congress passed in '79 after the establishment of relations with the PRC and the (pro forma) breaking of relations between the United States and the ROC on Taiwan by President Carter. If I recall, the act authorizes quasi-diplomatic relations with the ROC government by establishing the American Institute in Taiwan and upholds all international obligations previously made between the ROC and US prior to 1979, with the exception of the Mutual Defense Treaty between the US and the ROC, which was quietly allowed to expire in 1980. Some people thought that Taiwan would attempt a declaration of independence during the 2008 Olympics in Beijing but that didn't happen. Others point out that the current US administration has publicly declared that given the status quo, it would not aid Taiwan if it were to declare independence unilaterally."

"But we came to the aid of Taiwan in the '90s!"

"In 1996, the PRC began conducting military exercises near Taiwan, and launched several ballistic missiles over the island. The saber-rattling was done in response to the possible re-election of President Lee Teng-hui, who had promoted a controversial 'two states' theory for cross-strait relations. The United States, under then President Clinton, sent two aircraft carrier battle groups to the region, sailing them into the Taiwan Strait. The PRC, unable to track the ships' movements, and probably unwilling to escalate the conflict, quickly backed down. The event had little impact on the outcome of the election, since none of Lee's contestants were strong enough to defeat him, but it is widely believed that the PRC's aggressive acts had, far from intimidating the Taiwanese population, given Lee the boost that pushed his share of votes over 50%."

"That explains some of the history but it doesn't explain why Obama won't dispatch the

Navy to defend Taiwan."

"We have too many troubles at home, Randy. Even a serious seasonal flu outbreak could be a problem but we're also dealing with H5N1 and pneumonic plague. I'll tell you, the plague has to be weaponized. I think that the terrorists were just waiting for an opportunity to release it, and I also believe that June and you nailed it on the head. It's tough enough just dealing with the avian flu; imagine what it must be like in the large cities where they undoubtedly released the bioweapon. Remember that ad on TV a few years back saying if you were worried about the flu. You could move to a deserted island? It was an orange juice ad, but it made a very good point. Bush got it right implementing the travel restrictions and all we can do is hope that Obama doesn't rescind them."

"I don't like our not helping the Republic of China, but I'd imagine that the sentiment in the Country wouldn't allow the President to go to war with the People's Republic of China."

"I agree Randy. We have enough problems at home. Just getting through this crisis will strain the resources to near the breaking point. Worse, what will happen if the virus mutates again?"

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Not every disaster strikes suddenly like a hurricane or an earthquake. Some start slowly and build. The concept of restricting travel to limit spread of the disease had limits because they overlook human nature. Human nature would be to flee in a face of a disastrous illness; fear is a powerful motivator. It is even more so for a Country with a population of 300 million and only enough medical resources for 60 million people. The second factor is the resentment that certain people can have the vaccine or Tamiflu, but 80% of the population can't. We come finally to the point where someone made it to Lakin and was ill with the H5N1.

"Randy, this is Doctor Williams.

"What's up Doc?"

"Lakin is under a complete quarantine as of this morning. Pass it along to all of the people in your area and if they need anything, June and you will have to take care of them."

"What do you have?"

"It looks like H5N1. You were right on your speculation about the pneumonic plague, there have been outbreaks in several major cities but it isn't in Kansas yet. By the way, I have H5N1 vaccine for everyone in your area."

"They should be able to treat the plague, Doc."

"That isn't the problem, Randy. The problem is getting the people and treatment together. You remember how short the US got on Cipro, don't you? Back in 2002 when we had the Anthrax scare? I don't believe we're going to see that out here in the Country but the people can't just sit in their homes waiting for something to happen. Let everyone to know to stay out of town."

"How long?"

"Check with me in a month."

"Paul, Randy. Doc called and Lakin is quarantined. He says it will be at least a month. I just called to let you know and I have to contract everyone else."

"What about the plague?"

"It hasn't made it to Kansas, yet. Doc claimed some of the large cities had it but that he didn't believe it would get to Kansas. Why don't you and the family come over for supper, we're having beef and homemade noodles?"

"I ask Marilyn and let you know."

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"Did you let everyone know?"

"Yes, but they weren't happy about it. A couple of people said they needed things from town."

"If you don't have what they need, maybe we can help."

"The problem is that new Medicare subpart D, Paul. They only let you get a 30-day supply of drugs. We have some generics we can substitute, but we aren't a pharmacy. I have standard Insulin, Verapamil, Glucotrol (Glipizide), Benadryl and Nitroglycerine. Other than that, all we have is our drug box stuff, the antibiotics and the leftover Tamiflu."

"What do we need to guard against?"

"Catching cold."

"And rabies?"

"Not a half bad idea. Yellow fever isn't that common, we could have probably foregone that, but I am very worried about the ordinary things like broken bones. I believe that Doc held off as long as he did because common sense says just to bundle up well when

it gets cold out. I don't really believe we're going to see much primary pneumonic plague. What the hell, the six of us are protected better than we probably need to be. The really key thing was that series of rabies shots. Smallpox to be sure but I wasn't all that concerned about it. Broken bones, yes. We're covered for most anything, in my very humble opinion."

"We got all 3 shots so we're protected, right?"

"Absolutely. Out here in the Great Plains we can avoid most everything else. It didn't hurt to get the smallpox vaccinations but Yellow Fever was definitely overkill. Why complain, we're in very good shape. With the portable X-Ray and the lab blood machine we have most things covered. Doc said he wasn't all that convinced the Tamiflu was the answer to all of our problems but it was what was most readily available. Assuming it does what is supposed to do, if we wear masks and minimize contact, I think we'll come through this pandemic in good shape whether we got the vaccine or not."

## An Unlikely Outcome – Chapter 7

"We'll need to emphasize to everyone to stay out of town, won't we?"

"You can bet your bippy on that. I'm not about to shoot someone who is hungry. I have food we can share and plenty of the N-95 masks left. We even have spare Tamiflu. We should think in terms of keeping them away and providing them with essential food and even Tamiflu, if necessary. June and I are emergency medical technicians, not law enforcement. Not that we wouldn't or couldn't use force as necessary, but damn, I'd hate to do that."

"What about that Tamiflu?"

"It only really helps if they get it soon enough, 48 hours."

"Will you be able to tell if it's the flu, the bird flu or the pneumonic plague?"

"Damned if I know. We can evaluate anyone who shows up and hope we can make a differential diagnosis. Isolation is critical until we know. We have the antibiotics and Tamiflu for as long as it lasts. We can get blood samples and do microscopic comparisons."

"And if someone shows up with the plague?"

"IV antibiotics and a Bible; otherwise Tamiflu and hope like hell we've gotten to them in time. We just have to put our families first."

"Where can we keep them?"

"June suggested our house, but I nixed that idea. We don't have any biocontainment suits. Clean up a spot in a barn or an outbuilding like a machine shed and keep it warm with a hog house heater. Fill them full of whatever seems appropriate and pray like it's a Sunday morning."

"What are the Sheriff's people using?"

"The 3M type P100 masks with replaceable filters, exam gloves and Tyvek suits of some kind. Remember, they've all been vaccinated, so I presume the garb is in case pneumonic plague turns up."

"P-100?"

"Yeah, 99.98% of the pathogens. I have a few of the P-100 with the valves. I can give you a dozen if you want."

"Are you planning on us helping you?"

"That would be real nice."

"I'll take the P-100 masks then."

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Apparently the US government let China take Taiwan without as much as a comment. However, if you follow the Chinese plans, you should know that after China gets Taiwan, they want Vietnam for their oil and gas reserves. The Nazis only wanted Poland, but you know that story... And of course everyone knows that the people in North Korea are starving, right?

Here's the account of the 'real' Bedford Incident:

In August 1957, USS Gudgeon, a diesel submarine, was poking around the entrance to the Soviets' largest naval base on the Pacific, Vladivostok. Its goal was typical for a US spy sub of that era: to monitor Soviet ship movements through its periscope and intercept their radio communications.

Several crewmembers recall that Gudgeon had staked out a position in relatively shallow water. It may have been just outside the 3-mile territorial limit recognized by the United States, they said, but it clearly was well inside the 12-mile limit that the Soviets claimed. Suddenly, an alert rang out on Soviet radio channels, and as many as eight destroyers began steaming toward the area where Gudgeon was hiding. Gudgeon turned, its 90 officers and enlisted men rushing to take battle stations and load torpedoes into its eight tubes, and sprinted for the open sea, with the bigger, faster Soviet surface vessels in avid pursuit.

As the sub approached, or just after it sped past the imaginary 12-mile line, its skipper, Norman B. "Buzz" Bessac, a 34-year-old Lieutenant Commander, ordered the boat brought to a full stop, hoping it could "go quiet and lose" its pursuers, crew members said. But the ploy failed. As Gudgeon tried to hide below perhaps 200 feet of water, Bessac instructed his men to get ready for what seemed likely to be a long, frightening and lonely siege, the crew members said.

When a diesel submarine is forced to stay underwater, it depends entirely on power from its electric battery previously charged by the diesel to circulate air, operate interior lights, heat food and provide bursts of speed for a possible getaway, and life aboard becomes much more precarious. The snorkel sucks in air needed to operate the boat's diesel engines and to refresh the air that its crew breathers. Diesel subs normally snorkel every night.

In Gudgeon's case, the menacing presence of the Soviet destroyers meant that the sub would be unable to go up to periscope depth, about 60 feet below the surface, and snorkel that night. The boat also could not send any kind of plea for help without rising

enough to pierce the surface with its radio antenna. So Bessac ordered that every precaution be taken to preserve electricity and air, the crewmembers said. Fans and blowers that pushed air around the submarine were turned off. Lights were trimmed to a dim, candle-like glow. Crystals of lithium hydroxide, a chemical that absorbs the carbon dioxide exhaled by the crew, were sprinkled on cloth mattress covers laid out in various compartments.

Bessac instructed all non-essential crewmembers to stay in their bunks. Despite the rising tension, Gudgeon's officers forbade cigarette smoking, which give off carbon monoxide. As the hold down stretched through that night, the whole next day and well into a second night, the sub's air got so thick and foul that many of the men developed severe headaches.

Every hour or two, one of the destroyers would bounce active sonar off Gudgeon's 290-foot-long hull, creating chilling metallic "pings" that resounded inside the sub and in the minds of its crewmembers. The destroyer then would steam over the top of the submarine and drop a wave of depth charges that detonated above or around it. "They would circle, and one of them would make a run and drop" its depth charges, one Gudgeon crewmember said. "Then they'd go back out and pick up again (on sonar), and somebody else would come in and make a run.

One crew member said Gudgeon's officers decided after the first wave of explosions failed to cause serious damage that the destroyers probably had dropped small, practice-sized depth charges similar to US Mk 40 hand grenades instead of full-power charges like those that sank scores of submarines in WWII. The grenade-like charges make a terrifying noise that splinters the water like a jackhammer ripping through concrete, but they are unlikely to cause much damage to the thick steel hull of a submarine. Still, he said, "The thing you worry about when they drop the damn things is that the next one's going to be a real one."

Several times, Gudgeon started to creep ahead deep under the water in an attempt to wriggle free. But each time, the crewmembers said, the destroyers peppered its hull with sonar pings and laid another string of the grenade-like charges in its path. At one point, Gudgeon tried to elude the gauntlet of destroyers by shooting a noise-making decoy out of its garbage ejection tube in one direction while it moved in another, one crewmember said. Another time, he said, the sub went below its "test depth" of 700 feet or so in a vain attempt to escape the reach of the Soviet's sonar.

Finally, after more than 30 hours under Soviet control, the sub's battery had gotten so weak, and its air so horrid, a new fear took hold among its crew: If Gudgeon had to surface in the midst of the destroyers, would the Soviets try to board it and capture the crew? With this possibility in mind, some of the officers and intelligence operatives on board hastily destroyed a number of classified documents, one crewmember recalled.

But there was a hopeful sign: During the hold down, a few of the Soviet destroyers had broken off from the pack and sailed back toward the port. So Bessac, who had decided

he would fight rather than allow the sub to be boarded, tried one last stratagem, crewmembers said. He ordered the crew in the Control Room to bring the sub to periscope depth, where it quickly raised its radio antenna and shot off a message to US 7th Fleet headquarters in Japan asking for assistance.

The sub also stuck up its snorkel mast to try to gulp some fresh air, but a Soviet vessel raced straight toward the pipe, as if to ram it, and "drove us back under," one of Gudgeon's crew members said. At this point, Bessac had no choice but to risk bringing Gudgeon fully to the surface. As the sub rose slowly through the water, Bessac made sure that the doors to its torpedo tubes were open, the last action needed to ensure that the torpedoes could be fired at the push of a button, crewmembers said.

After the sub broke the surface, Bessac clambered up the ladder inside the sub's sail and onto the bridge, where he instructed a signalman to point the light at one of the Soviet ships out in the night and blink a message in Morse code. The staccato light beams identified Gudgeon as a US Navy warship and asserted its right to be in what its crew believed were international waters. A few minutes later, the Soviets flashed back a message that was comforting, though somewhat gloating, in its simple statement of the obvious. These blinking lights identified the Gudgeon's adversary as "CCCP," and suggested the sub head for home without delay.

The Soviet ships then parted their ring around Gudgeon and allowed it to set sail. A few hours later, US warplanes passed overhead and could see that Gudgeon had survived the ordeal.

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Just when we thought it couldn't get any worse, it did. China took Taiwan without much more than a whimper from the UN and the US remained silent. Strange when you consider that in 2005, the US and Taiwan signed a new treaty. Perhaps it had more to do with the Administration than anything else. Most times in the early part of the 20th Century, a Democrat was in power when we went to war. Starting with Reagan, that all changed. Now it was the Republicans and not the Democrats who pushed for wars. But with the War on Terror, America about had its belly full of fighting.

The number of fatalities in Iraq was but 10% of the number in Vietnam, BUT, America didn't like taking casualties. This new modern Army and Air Force the Country was building was something out of a Science Fiction novel. The Air Force was testing pilotless aircraft and the Army was all in favor of abandoning heavy armor in favor of mobility. I only know one way to spell dumb, D-U-M-B! They had abandoned the OICW due to excessive weight.

XM29 status update (September 2005): following the increase of caliber of OICW grenade launcher component from 20 to 25mm, in 2004 it has been decided to split the OICW system into two separate weapons, the 5.56mm XM8 modular assault rifle OICW Increment 1), and the 25mm XM25 airburst assault weapon / grenade launcher (OICW

Increment 2). Development of the complete XM29 (OICW Increment 3) system has been shelved, and will be resumed in the future only if all current problems with OICW Block 1 rifle component are solved, and weight constraints of entire system are met.

Given our failure to respond to their incursion into Taiwan, the Chinese assumed that we wouldn't object if they also seized Vietnam to get that oil and gas the Vietnamese had discovered. After all, the US was fully occupied fighting H5N1 and pneumonic plague. But the H5N1 was overcome when the vaccine was finally distributed and isolation was doing much to prevent the further spread of the plague. Obama and Biden were taking a beating in the press. Because Dick Cheney had an active role as Vice president, Biden thought he should have the same.

"What do you think of the situation in Washington, Randy?"

"Do they have an outbreak of pneumonic plague, too?"

"No, I'm talking about China attempting to invade Vietnam."

"Let them have it, we lost too many people over that Country already. Don't we have enough problems here at home? Just what we need now Paul is to be hunkered down in some shelter for who knows how long."

"I just surprised that we didn't draw a line in the sand over Taiwan."

"I've never been able to figure out politicians, reporters or lawyers, Paul. It's not like the human body in terms of getting an understanding. I don't trust them and never have. So, fill me in."

"It's really pretty simple, Randy, Vietnam has oil. China wants it. Washington objects to China taking it."

"Crap, it's always about oil, isn't it?"

"I'm afraid so, yes. You wait and see; President Obama will warn China to back off Vietnam and will send a couple of Carrier Strike Groups to enforce the warning. They will end up getting tangled up with the Chinese Navy and he'll send more Carrier Strike Groups to back up the first two. He'll probably start repositioning the Ohio-class subs to within striking distance of China. All hush-hush like it's no big deal. The next thing you know, China will figure out he isn't bluffing and raise their preparedness level higher and we'll respond in kind."

"And then what?"

"Hard to say, but if no one blinks, sooner or later, someone is going to attack the other side and then I expect all Hell to break loose. One side will use missiles tipped with nukes and the other side will respond. It won't end until one side runs out of weapons."

"We have more nukes than China."

"Don't forget North Korea, they have enough nukes to blow the living hell out of Japan. The thing that really bothers me is that Pakistan and India have nukes too. I can't believe that China would use all of its nukes on the US and leave itself vulnerable in the Kashmir."

"Didn't Bush work out some kind of deal with India?"

"He tried to, but Congress was in a tiff over the ports deal and they wouldn't agree on the deal with India until Bush agreed to back off that UAE firm being allowed to own the service company for those 6 US ports. He refused and they refused and the entire thing ended up in a stalemate. Bush was trying to salvage what he could in the fall 2006 elections, but the Republicans took a beating in that election. He basically became a lame duck President in November of 2006."

"I don't believe you're using the term correctly. A lame duck politician is one who has lost reelection."

"Don't change the subject, Randy. The whole point was for me to explain to you how we now find ourselves in the unenviable position of getting into a war with China over Vietnam."

"Nobody wins a nuclear war, Paul. At best all that can be said is the one Country is the bigger loser. The rhetorical definition of the winner is whoever has the most weapons. That's the United States. China should know that they can't win a nuclear exchange with us so why have it?"

"The thing I've never understood, Randy is the Oriental mindset. What's that famous quote attributed to Admiral Isoroku Yamamoto? *I fear all we have done is to awaken a sleeping giant and fill him with a terrible resolve.* Is that right?"

"I heard that, Yamamoto certainly believed that Japan could not win a protracted war with the United States, and moreover seems to have believed that the Pearl Harbor attack had become a blunder – even though he was the person who came up with the idea of a surprise attack on it. *The Reluctant Admiral* relates that *Yamamoto alone* (while all his staff members were celebrating) spent the day after Pearl Harbor *sunk in apparent depression*. He is also known to have been upset by the bungling of the Foreign Ministry which led to the attack happening while the countries were technically at peace, thus making the incident an unprovoked sneak attack that would certainly enrage the enemy. The line serves very well as a dramatic ending to the attack, and may well have encapsulated some of his real feelings about it. It does not seem, alas, to have been real."

"It doesn't really matter if he said it or not, Randy. The real problem, as I see it, is the

difference between Oriental and Occidental thinking. It may sound like I'm a Charlie Chan fan to you, but somehow, we have different mindsets."

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The character of Charlie Chan was created by Ohio-born writer Earl Deer Biggers, and although Charlie's first film appearances were peripheral, Fox soon put him front and center, and actor Warner Oland played the part with aplomb. When Warner Oland died in 1938, Sidney Toler stepped in to carry on the role, and the series hardly missed a beat. The son of choice about this time became Jimmy Chan, #2 son, played by Victor Sen Yung. In the earlier Oland Chan films, Keye Luke had played #1 son, Lee Chan, debuting in 1935's "Charlie Chan in Paris." Charlie Chan was modeled on the real life Honolulu detective Chang Apana. (I'm the real Charlie Chan fan; you have to be old to even remember Charlie Chan.)

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"Orientals and Occidentals do have different mindsets, but it has more to do with how they value human life, Paul. Many Orientals place little value on an individual human life. If the Chinese perceive that they can kill more of us than we can kill of them, percentage wise, who knows what they might do?"

"They might attack the US with nuclear weapons, if that's the case, Randy."

"As Arnold would say, no problemo, we do have a shelter and more than enough food stored to last until we can egress and resume our life."

"Do you realize how cold that sounds?"

"Hey, I'm not going to launch any missiles. But all the preparations we've made had just such a scenario in mind. Why else would we have built a shelter to protect against radiation? Just because we could? June and I long saw the possibility. You didn't really think we built the shelter to hide from the flu or pneumonic plague did you? The only mistake I think I made was not buying a set of cowboy guns. This Country will regress at least a century, possibly more. What are we going to do when we run out of propane for the generator? For that matter, what are we going to do when the generator wears out? We should have been thinking about solar panels or a wind turbine."

"I've read up on them so I have a general idea what we might need Randy. We could get by with some of those 10kw wind turbines and some inverters. Since we have vaccination cards, we could probably get through to Denver and as large as Denver is, we should be able to find anything we need."

"How soon are we going to have a war?"

"That will take a while; everyone has to make a complete horses butt out of themselves

before the missiles start to fly. We'd better sit June and Marilyn down and talk this over with them."

o

When one thinks about it, Randy and Paul didn't need many things in Denver. Both were radio amateurs and had radios. In addition, they had one of the fire Department radios from Lakin. Both were farmers or at least lived on a farm. They had a ton of food put up, for sure enough for 6 people for a full year just with the things they got from Walton Feed. If they could solve the electricity problem, they had it made for quite a while. The typical 1,800rpm generator will run for a minimum of 15,000 hours and up to 30,000 hours before it needs repair; that's 2-4 years. It was purchased used, but the generator had low-hours of previous use.

Kansas is wheat Country. Most of the state is as flat as a pancake. Not all, but a lot is. Kansas contains three climate types, according to the Köppen climate classification: humid continental, semiarid steppe, and humid subtropical. Kansas varies in elevation from 4,039 feet down to 679 feet with a mean of 2000 feet.

The eastern  $\frac{2}{3}$  of the state has a humid continental climate with cold winters and hot summers, with most of the precipitation falling in the summer and spring. The western  $\frac{1}{3}$  of the state has a semiarid steppe climate. Summers are hot, and often very hot. Winters are cold in the northwest and cool to mild in the southwest. The region is semiarid, receiving on average only about 16 inches of precipitation per year. Chinook Winds in the winter can warm western Kansas all the way into the 60s, 70s, and even 80s.

The far south central and southeastern reaches of the state have a humid subtropical climate, with long, hot summers and short, mild winters and much more precipitation than the rest of the state. Precipitation ranges from about 46 inches/year in the southeast of the state, to about 14 inches/year in the southwest. Kansas is the 9th or 10th sunniest state in the Country, depending on the source. No state east of Kansas, including Florida, is sunnier on average. Western Kansas is as sunny as parts of California and Texas. Snowfall ranges from around five inches in the fringes of the south, to 35 inches in the far northwest. Frost free days range from more than 200 in the south, to 130 in the northwest.

Thinking about the history of Kansas and Randy's remark, having cowboy guns would make sense for several reasons. At one time, Kansas was the Wild West and names like Earp, Masterson and Hickok occupy pages in the history books. They lived on farms and we already know that they have at least saddle horses. A couple of Winchesters in .45 Colt and a couple of SAA revolvers might fit in really well with those horses. I guess we'd better make it 4, but they'll have to be used if they're real Winchesters. The original Ruger Vaquero was built on the Blackhawk frame and costs a fraction of the price of a real Colt. Which would you rather have, a .45 Colt or a 9mm? The 3 most common calibers in the larger bore handguns are: 9mm, .40S&W and .45ACP. There are still a lot of the .38 Specials floating around, but why buy one when you can shoot both .38 Special

and .357 magnum in the same gun?

It would seem that things change and not always for the better. In a practical sense, I'm talking guns, the government and the media, take your pick. The little tiny bugs get more virulent and it becomes harder and harder to stop them. And when it's triggered, nothing stops a nuclear weapon. The only solution was to not build them in the first damn place, but it has gone way beyond that.

Paul and Randy made their way to Denver and bought 4 10kw wind turbines and lots of spare parts. They also got 4 rifles and 4 'good use Ruger Vaqueros' revolvers, each, and had them shipped to a gun dealer in Kansas. It was easier to buy the rifle scabbards than to make them so they got those and some of those Méxican buscadero rigs, for about \$50 each. They still had time; the world hadn't blown itself up, yet. They installed 2 turbines on each farm, a primary and a backup. It wasn't so much the turbines were expensive, but the batteries. The batteries were not only expensive, but too heavy to haul all the way back to Kansas unless they rented a trailer.

Buying batteries would have been a waste anyway; the output of the wind turbines was a well regulated 110 volts. To store the energy in batteries would have required a charger and an inverter. What varied with the rpm of the turbines was the amperage. Neither chargers nor inverters were 100% efficient, not even in 2009. Advances had been made in wind turbine design, however. That started when Dubya said that the Country needed to reduce its dependence on petroleum products way back in 2006.

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Randy and June had filled the 30,000-gallon tank for a little over \$1.50 a gallon when they first got it. Now, propane was \$2.95 per gallon at bulk fill rates. By the time the men got back from Denver, their guns had arrived at the gun dealer so they went and picked them up. They brought the ammo home with them. While they were busy installing the towers, two Carrier Strike Groups were assigned to points off Vietnam.

The US Navy began carrier operations off the coast of Vietnam in early 1965, when strike aircraft from the USS Coral Sea and USS Hancock mounted the first of the Flaming Dart reprisal attacks on the North. Part of Task Force 77 of the US Seventh Fleet, the carriers operated on what was known as *Yankee Station*, an area about 140 kilometers off the coast of North Vietnam. At first three carriers were involved, steaming independently and with destroyer escort, but in June 1965 this number was increased to five. By that time a sixth carrier had been dispatched, at General Westmoreland's request, to *Dixie Station*. About 185 kilometers southeast of Cam Ranh Bay off South Vietnam, this position was used to hit targets in the South. The carrier remained on station for about a year, until sufficient airbases had been established ashore. Those were the positions the CSG took up when they returned to Vietnam all of those years later.

Yankee Station was in the Gulf of Tonkin. Dixie Station was somewhere in the South China Sea, they weren't fixed positions. Once the US Navy arrived off the coast of Vi-

etnam, it divided the coastal waters into two sectors in order to more easily manage the different and distinct mission requirements of each. Dixie Station included all the territorial waters south of the old demilitarized zone (DMZ), and Yankee Station referred the area north of the old DMZ.

The first Carriers sent were the Reagan and the Bush, our two newest Carriers. The Nimitz, Vinson, Lincoln and Stennis were on standby, loading and getting ready to sail. These were Strike Groups, not Battle Groups. When satellites showed that the Chinese began to sail their reserve fleet, the four remaining Carrier Groups departed.

"I don't like this one damn bit, Paul. What is Obama thinking of sending 6 Carrier Strike Groups?"

"We had this discussion already. The Chinese didn't bluff and we have to send all 6 CSGs. As soon as someone screws up, we'll be at war with China and that's the war that nobody will win."

"This is really strange. I'm the preparedness freak and you aren't. June and I got medical training for just such an occurrence, but now I wish we had gone ahead with that Paramedic training, in retrospect, we had plenty of time. I feel a little like Dorothy in *The Wizard of Oz*, like *we aren't in Kansas anymore*."

"Look at it this way Randy, we pretty much know what is going to happen, just not the exact date. I can't think of anything else you could have done to be more prepared. I guess that Marilyn and the kids and I will be taking you up on the offer for a place in your shelter. What say we move the food I have stored in my basement over here?"

"Don't bring any more than you think you will eat, Paul. After the radiation dies down, you're going to want to return home."

"Some idiot might break into our home and empty it out. We need to put the food somewhere they won't find it."

"Will it fit in your storm shelter?"

"I doubt it. Maybe we could move it into the haymow. You know, move a few bales and create a hole. We can fill it up and put some hay back in place. I can't imagine anyone would think to look in the barn for the food."

## An Unlikely Outcome – Chapter 8

"June, when I said we should prepare for a nuclear war, I didn't actually believe we would ever have one. I was thinking more of a tornado than anything else."

"That's what you said then. We went ahead and prepared for the worst and hoped for the best. We didn't cause the situation to deteriorate to the point that it has, you can blame the White House for not honoring the agreement to protect Taiwan. The Country being tied up with the flu and the plague probably gave the Chinese the idea that we couldn't respond."

"The Chinese have satellites the same as we do; they must have seen those 2 CSGs steaming toward Vietnam."

"If they saw them, it might explain why they sailed their reserve fleet. However, those same satellites must have seen the other CGSs getting ready to sail and leaving port. I don't know about the boomers, Paul seemed to think that we would preposition several of them. I checked and each Ohio class submarine has 24 missile tubes all equipped with a Trident D-5 and 8 warheads each. You do know that Los Alamos National Laboratory began manufacturing cores for that W88 warhead. It's secret so nobody knows for sure, but I'd imagine all of the boomers they send against China will have the W88 warheads." [Not true, BTW. They only made about 400 W88s at Rocky Flats.]

"How big are they?"

"475 kilotons, maybe 25 times larger than the bombs we dropped in '45."

"A bombs or H bombs?"

"H bombs."

"What did Paul and you work out concerning their food?"

"He brought enough for 3 months, that's about the longest we'd be in the shelter, if it comes to that. We moved everything else to his haymow and buried it in the bales."

"One more question, why the cowboy guns?"

"They're old technology, black powder firearms. It has long been speculated that the Chinese might actually precede an attack against this Country with an EMP attack. Probably from one of those satellites they have in orbit. Most of the Country is totally unprepared."

"How many weapons could they deliver against us?"

"I have no idea. The last estimate I saw was 400 total, but those are old numbers and

they have that improved DF-31A solid fueled missile with a range of up to 12,000km. Their new DF-41 has an even greater range, 15,000km."

"Do the Chinese have boomers?"

"As far as I know, they only have three; one type 092 equipped with 12 JL-1 missiles with a range of 2,500km and two type 094 equipped with 12 JL-2 with a range of 8,600km. The Navy has that system called SOSUS. It would take an extremely quiet submarine to escape notice. I wouldn't think that the Chinese boomer stands much of a chance against our attack subs. Neither do I believe that their sub launched missiles are MIRV'd. If they take 10% percent of their missile force to use against India and Pakistan it would leave about 360, including the sub launched missiles, to use against both us and the Russians. If they go 50-50 on those 360, we're looking at 180 warheads apiece, give or take."

"Surely if they attack the Russians, they'd retaliate."

"I'd expect so. You know that we will, we could respond 1 for 1 with the missiles in a single sub. That would make for 192 warheads. Given the population of China, it's more likely we'd respond 2 for 1 or even more."

"Fine but what about us? What's the closet target?"

"I don't know about KC, but you can pretty much figure on Denver. They might go for Northcom and Cheyenne Mountain in Colorado Springs plus the silos in North Dakota, Wyoming and Montana. We will probably get fallout from Denver or the Springs, depending, of course, on the prevailing winds."

"And after?"

"It mostly depends on how much we get. Radioactive fallout decays 90% for every time factor of seven. In 7 hours, i.e., 7 to the 1st power the level is 10% and at 7 to the 2nd power it's down to 1% and so forth. Two weeks is just a little under 343 hours or 7 to the 3rd power. If we got 300R/hr, we'd be down to 300mR/hr in 2 weeks. The maximum safe level is about 100mR/hr per hour. Paul and Marilyn's kids should stay in the shelter longer. Again, if we got 300R/hr, we'd be down to 30mR/hr in 100 days."

"I don't see how we can stay that long, those horses will need to be fed and watered, honey."

"Short exposures at a slightly higher level should be ok. Paul has a worse problem. In addition to horses, Marilyn and he have cattle and hogs."

"Why don't the two of you move them down here for the interim?"

"I'll ask him. Our old hog house probably needs some work."

"Then why don't you put everything in the barn? How do you intend on protecting the livestock from fallout?"

"You have more questions than I have answers, dear. I'll have to do a little research."

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"Sure, I suppose we could move the livestock down to your farm, but how much protection does a barn offer anyway?"

"Paul, I was thinking that we could maybe move the baled hay from under the pole shelter and stack it against the barn. When I looked at KI4U, they showed a barn with dirt around it, but I don't believe that's practical in the time we have remaining."

"Well how much time do you think we have?"

"Figure maybe another week for the additional CSGs to arrive off the coast of Vietnam. After that, things will settle down or the balloon to go up, maybe another week."

"I believe I saw that movie. How much hay do you have?"

"Maybe enough for 3 layers of bales and if we cover the hay with tarps, it can be used as feed later. Unless you have a better idea, I say we should start moving hay."

"I have more hay than you do, let's haul some of it down here and make it 6 bales thick. If something were to happen to the kid's horses, they'd never forgive me."

The kids were Susan and Donald, ages 15 and 12 in 2005 and now ages 19 and 16. Susan had been a waitress in Lakin until the flu and plague came along. She came back to the farm to help Marilyn. Don was a sophomore in the spring of 2009 and a junior in the fall. Paul was more like an older brother to Randy than his best friend, but he was that too. You may recall that each youngster had an AR-15 HBAR, Browning Hi-Power, Ruger 10/22 and a 20 gauge Remington 870 combo. Don and Marilyn decided to trade guns, he took her 12-gauge and M1A and she took his 20-gauge and AR-15. Susan had dated Ray Jenkins since her senior year. He lived on a farm about a mile from theirs.

With a strapping teenager to help, Paul with Don moved their hay to Randy's while Randy moved his against the barn. It was a dawn to dusk endeavor, the hay had to be moved from the stack to a wagon, towed to the barn, and then unloaded and stacked. How much does a small hay bale weigh, 50 pounds on average? A hot bath helps and Icy Hot applied to the sore muscles can almost make one comfortable. When the hay was finally in place, they covered it with 12' x 16' blue poly tarps they got from TSC in Hutchinson. Susan got lucky and made the trip to Hutchinson while the 3 guys moved the hay. She enlisted Ray to ride shotgun.

"Sue, I think we're going to have a war."

"Ray, my dad and Randy are sure of it, that's why they're moving hay against the barn, to protect the livestock from fallout. We're going to Hutchinson to pick up enough tarps at TSC to cover the hay and protect it from the fallout."

"Do you think that I should maybe buy some things while we're in Hutchinson?"

"What kinds of things?"

"I'm not sure, Randy and June do the medical stuff if we can't get to town. I don't know, maybe a gun."

"Don't you already have a gun?"

"I have a Winchester 1300 Defender Combo with the stock and pistol grip that I got the extra 26" WinChoke hunting barrel for. And I have my 9422, but that's all."

"How much money do you have to spend?"

"I brought all I had; I thought maybe we could look at diamonds in Hutchinson."

"Are you asking me to marry you?"

"Well yeah, we had talked about it and I hadn't planned on proposing quite this way, but yeah. Sue, will you marry me?"

"Gee, I don't know, do you come from a good family? Do we go to the same church? Were you planning on having children and if so, how many?"

"Ok, ask me a question you don't already know the answer to."

"Are you open to suggestions?"

"What kind of suggestion?"

"Would you be willing to settle for plain gold wedding bands and spend the remainder of your money on things I might suggest?"

"Is that a yes or no?"

"Answer my question."

"I suppose, yes."

"Ok, you twisted my arm Ray, the answer is yes."

◦

Speeding down the highway at 55mph wasn't the best time for a kiss to seal the deal. Sue gave Ray a quick kiss when they arrived at TSC and they got 30 tarps, as per instructions. The next stop was to a Jewelry store where they picked out matching wedding bands and asked, because they were from out of town, for express service to get them sized. While the jeweler worked on the rings, Sue took Ray to a gun store, Shooter's Supply and Tackle. He didn't have a M1A rifle in stock, but called Coyotes Shooter Supply in Garden City and they would hold a M1A Loaded model for Ray to pick up on the way home. Sue suggested the newer Springfield Armory pistol, the XD .45ACP and the 13 round magazines.

With weapon and ammo in hand, they drove back to the jewelry store and picked up the rings, the next stop was Garden City and then home to share their good news. When they got to the Garden City gun store, the rifle was waiting and Ray asked about the 20 round magazines.

"I'll tell you young man, had a bit of a run on them lately, what with the new of a possible war and all. I only have 3 left, can you get by?"

"Ray, take those and if you need more, Daddy and Randy each bought 80 from some dealer on the east coast, they can give you a few or sell them to you for whatever they paid."

"How much are the magazines?"

"\$49.95 each."

"And how much is a case of military surplus ammo?"

"\$250."

"Ray, get magazines from Randy and spend your money on ammo. Make sure you get boxer primed ammo and Daddy can reload it."

"I'll take 2 cases of ammo and pass on the magazines."

◦

Marilyn wasn't surprised, Ray's mom, Rachel, had called and suggested that Ray took money with him to buy Sue a diamond. Ray's father, Michael didn't raise livestock, but had a rather nice storm shelter that doubled as a fruit cellar; unless you choose to refer to their saddle horses as livestock. Like everyone else in the area, they had gotten their flu shots from Randy and June. She was surprised when the kids returned and Sue

wasn't flashing that diamond.

"Mom, Ray asked me to marry him and I accepted. Rather than him wasting money on a diamond, we bought matching gold wedding bands and I made him spend the remainder of his money on a rifle, pistol and ammo."

"Did you two set a date?"

"You know what, we stopped in Lakin and got the license. I'm not so sure a large wedding would be a good idea with people still getting over the flu. How would you feel about a family only wedding at our house with the pastor officiating?"

"That's a relief," Paul laughed. "I was holding back money for a big wedding, but maybe instead, I'll just give the two of you the money so you have something to get started on. Say I don't need my shotgun do I?"

"Oh Daddy!"

"Well, what's the hurry?"

"Ray said he thinks there is a war coming."

"Smart boy."

o

Randy and June had their own issues; some drugs, like epinephrine and the tetracycline expire after a year and have to be replaced. When Marilyn called June with the happy news, Randy took another look at the shelter. Could they fit more people in? The shelter had 4 pairs of bunk beds; maybe they could add a couple of folding cots. If Susan was marrying Ray Jenkins, he was a really nice kid wasn't he, it would mean that they should try and accommodate Mike and Rachel. Randy couldn't remember their daughter's name, maybe Sally. Her name wasn't Sally, it was Sandra and Sandy was about the same age as Don, 15 to his 16.

Paul got on the phone first to Randy about shelter accommodations for the Jenkins and next to Mike about immunizations. If there was a war coming, it would be better if the talked to Doc Williams and brought all of their shots up to date like Randy had suggested to him.

"Mike, Paul Johnson. There were a couple of things I thought we should talk about now that Susan accepted Ray's proposal. Randy Webster had my family talk to Doc Williams and get brought up to date on all of our shots."

"She said yes? Good, Ray hasn't been home yet. Shots, you say? Well we had the whole series, Doc called because Ray and Sue were dating and told us about the series

of shots you were getting. He thought that since we might end up being family we should do the same. I appreciate you thinking of us Paul, but we're covered on that front anyway. You heard that the other Carriers sailed, didn't you? We've been adding to the food we had stored in the storm shelter that doubles as our fruit cellar. We don't really have a lot of room left in the shelter. We have plenty of food, though."

"What do you have in the way of standby power, Mike?"

"Solar panels on the roof of the machine shed and a small gas generator. We had to put in a battery bank because you can't really store the energy without batteries. What do you have?"

"Randy and I went to Denver and got 2 10kw wind turbines each. We passed on the batteries, these turbines put out 120 volts and it seems like the wind is always blowing. I talked to Randy and he says that he had room for you and Rachel plus Sandy in his shelter along with us and the soon to be newlyweds."

"Aren't they planning on a Church wedding?"

"Actually, if you can believe it, Susan talked Ray into plain gold wedding bands and they stopped in Lakin and got a wedding license. She told her mother that she just wanted a small family only wedding at our home. I had some money setback for her wedding so I told them I just give them the wedding money to get them started."

"You know, I have that cottage that the hired hand lived in back when we still had a hired hand; I suppose they could live there if they wanted a place of their own. If he didn't buy her a diamond, what did he buy instead?"

"Would you believe a Springfield Armory M1A Loaded rifle and a XD .45ACP by the same company?"

"Oh. Well I suppose that does make sense. I've collected Winchester lever action rifles for years. When they finally got around to making them in pistol calibers, I got the .357, .44 magnum and .45 Colt. I also have Ruger case blued original Vaqueros in .357 and .45 Colt. They're all in 5½" barrels. You say he bought an M1A?"

"Mike I really like the M1A, we have 2, a Loaded model and a Super Match. Randy and June each have a Loaded model. We originally got our kids Browning Hi-Powers and AR-15s, but Don and his mother traded rifles and handguns. If you can afford it, that dealer in Garden City has several weapons on hand he ordered in advance. He doesn't have but 3 of the 20 round magazines according to Ray, but When Randy ordered 80 from Ammoman, I did the same. Don't worry about magazines if you get M1A rifles."

"I'll have to talk to Rachel about this; I really don't know whether to get her a 9mm or a .45ACP. I think she and Sandra would prefer the AR-15s."

"I reload so you should buy a couple of cases of ammo per weapon and components. If you have the money, the more ammo you buy now the better. I use the rule of thumb of 5,000-rounds per rifle and 500-rounds per handgun."

"Paul I can't believe what's happening. If only the President had stood up against China when they grabbed Taiwan, we might have been able to avoid a war. I don't believe China will back down now that we didn't respond earlier. I think you're right, I need to make a trip to Garden City."

o

The clock was ticking for the residents of the Country and most knew it. While the liberals were convinced that Obama's show of force would force the Chinese to back down, many conservatives disagreed. Guns sales soared and it soon became a matter of what you could get instead of what you wanted. Military surplus 5.56×45mm and 7.62×51mm disappeared from stores shelves. Grocery stores began to experience runs on their food supplies, so much so that they were force to limit purchases. Places that sold survival type foods stopped taking orders and hoped that they had enough time and inventory to fill the orders they had.

Only those poultry product producers who kept their birds in confinement were exempted from killing their flocks. You do recall the presidential order, don't you? Chicks soon were available and sold rapidly as people became willing to do anything to provide for the future. Because Randy and June had a chicken house, but no chickens, they bought all they could, plus a large supply of chicken feed. They were just trying to stay a step ahead.

By this time, the additional CSGs had reached the South China Sea. DHS raised the threat level to orange and the military was on DEFCON 3, standing by to go to DEFCON 2 or even 1. Susan and Ray were married on the Sunday after he proposed. Everyone was feeling a sense of urgency.

"Hi Doc, Randy. Fine, thanks. Say, it looks like we're getting close to all hell breaking loose in Southeast Asia. Do you have any recommendations of things that we should add to what we already have?"

"Randy, it's too late for June and you to get Paramedic training and I wouldn't be comfortable with you having much more than you have. We've already stretched that rubber band to near the breaking point. We're just going to have to trust in God and good luck for a chance to get through this. I've got a patient, but if something specific comes to you, give me a call and we'll discuss it."

"Who was that?"

"Oh, I call Doc to see if there was anything else he thought we should have."

"And?"

"He said we had all that we could use, given our level of training. If we think of anything, he said to give him a call."

"It's starting isn't it?"

"I know that one. Uh, Patricia Neal playing nurse Maggie Haynes in the movie, *In Harm's Way*. She said that just before John Wayne got on his old straw bottomed cruiser to go up against the Yamato."

"Answer my question."

"I think soon, June. Hey, that rhymes. Paul and I talked and anytime within the next week."

"Don't you think that you'd better move their livestock before it's too late? Otherwise, why did you bother stacking all of that hay against the barn?"

o

"Paul, Randy. June suggested that it's time to move your livestock. Sure, come on down."

Paul had 4 cows, 4 steers, 1 bull, 1 boar and 12 sows. Even though it was only a short drive, it took most of the day to load, haul and unload the animals. When they had the cattle and hogs moved, they went back for the 8 horses. Using a 4 stall horse trailer, that took 2 more trips. The girls worked out and the Johnson's ate dinner with the Webster's.

Confused yet? Randy and June Webster are EMT-2s and married but have no children. Paul and Marilyn Johnson are married with 2 kids, Don and Susan who is married to Ray Perkins who has a sister Sandy and his parents are Michael and Rachel Jenkins. Sue and Ray are 19, Don is 16 and Sandy is 15. The 3 families live on adjoining farms north of Lakin, Kansas. Get it? Good. And yes, they're all farmers of one kind or another. Only Paul raises livestock although Randy has horses and chickens and Mike has horses. If you're from the Lakin area and don't know them, you should try and get out more. Maybe not, got the flu or the pneumonic plague?

o

Sometime in the very near future, all of them are expecting the crap to hit the fan. The US has 6 Carrier Strike Groups in the Pacific Ocean off the coast of Vietnam intent on preventing the Chinese from invading and seizing the Vietnamese petroleum resources. Good idea, as far as it goes, but the entire northern border of Vietnam is the southern border of China.

According to the CIA, "Southeast Asian states have enhanced border surveillance to check the spread of avian flu; Cambodia and Laos protest Vietnamese squatters and armed encroachments along border; in 2004 Laotian-Vietnamese boundary commission agreed to erect missing markers in two adjoining provinces; demarcation of the China-Vietnam boundary proceeded slowly and although the maritime boundary delimitation and fisheries agreements were ratified in June 2004, implementation has been delayed; China occupies Paracel Islands also claimed by Vietnam and Taiwan; involved in complex dispute with China, Malaysia, Philippines, Taiwan, and possibly Brunei over the Spratly Islands; the 2002 *Declaration on the Conduct of Parties in the South China Sea* has eased tensions but falls short of a legally binding *code of conduct* desired by several of the disputants; Vietnam continues to expand construction of facilities in the Spratly Islands; in March 2005, the national oil companies of China, the Philippines, and Vietnam signed a joint accord to conduct marine seismic activities in the Spratly Islands."

"For all intents and purposes it seems to me that China decided to resolve the dispute with Vietnam over all of those islands they jointly claim."

"Paul, nothing good is going to come of this. Look at us, armed to the teeth, barely recovered from a flu pandemic and a terrorist attack with pneumonic plague and sitting with baited breath waiting for the other shoe to drop."

"How did you manage to get that into a single sentence?"

"Stop it you guys; sometimes the way you talk, it's hard to believe that you're best friends."

"When do you think?"

"I don't know, Saturday is the 4th of July. We are GMT-6 and Hanoi is GMT+7, so they are 13 hours ahead of us. Beijing is GMT+8 or 14 hours ahead of us. As a general rule, most military operations occur by dawn's early light. Assuming the rule is followed, dawn on July 5, 2009 over there would be around noon or 1pm on the 4th of July over here."

"How can you be so exact?"

"I'm guessing. Look, they can't sit there with the hammers cocked for very long. All I'm saying is that I'd expect it to be resolved or go the other way by noon on Independence Day."

## An Unlikely Outcome – Chapter 9

Do you want to know the exact date and time of when the world is going to end? Personally, I'd go outside and try to catch the nuke. Preparedness only takes a person so far. Supplies and weapons are great, but they don't do you one bit of good if the bomb falls on your house. Remember New Orleans? Even more important than those things are the knowledge and skill to make use of what you have. In the year 2009, the world had been through a major Pandemic and perhaps as many as 100 million or more people had died. The US had it worse because somebody thought that they'd give the H5N1 a helping hand and introduced the pneumonic plague to the Country.

If you thought the economy was a mess in 2006, you should have seen what it looked like in June of 2009. Having the troops home meant they were back in the job market and the US had exported so many jobs to foreign countries it was difficult to make a living wage. That term took on a whole new meaning with gas pushing \$5 a gallon. Who cared if the stock market was over \$13,000? All that did was make the rich, richer and the poor, poorer. Gold was up there too, running as much as \$1,250 an ounce, so what did that say about the US dollar? It wasn't worth much! That observation comes from a man who remembers 5¢ Snickers bars, all kinds of 3¢ candy bars and penny candies at the grocery store counter, literally a lifetime ago.

There was a time in the US when you could go a very long way on a buck's worth of gas. Now it would get you up to the next pump. Filling the tank on a Dodge Ram could cost upwards of \$175. You figure it out, 35 gallons at \$5 per gallon. When Dubya made his public statement back 2006, it was costing upwards of \$100 to fill the same tank. 18¢ gas? Hell, that won't even cover the tax. It would seem that we have a trifle too much government.

◦

All dates and times referred to are the date and time at Yankee station.

On Monday, 29Jun09, FA-18s flying BARCAP for the Reagan CSG near Yankee Station intercepted a flight of 6 Su-30 aircraft and turned them away. The PLA Air Force (PLAAF) acquired two batches totaling 76 Su-30MKKs between 2000 and 2003. The third batch, which consisted of 24 examples of the upgraded Su-30MKK2 variant, was delivered to the PLA Naval Air Force (PLANAF) in August 2004. BARCAP: One or more divisions or elements of fighter aircraft employed between a force and an objective area as a barrier across the probable direction of enemy attack. It is used as far from the force as control conditions permit, giving added protection against raids that use the most direct routes of approach. More than 100nm. The Chinese employ several anti-ship missiles: (YJ-8) 42km; (YJ-81) 80km; (YJ-82) 120km; YJ-83 (150~200km); and (3M-80E) 90km, just to name a few. (200km is ~ 108nm.)

Back in the United States, the DOD with the approval of the President, slipped to DEFCON 2. Russian authorities were immediately notified of the change in status and ad-

vised that it pertained to the incident in the Gulf of Tonkin. All 6 ships in the area changed from modified ZEBRA to full ZEBRA without going to general quarters.

◦

On Tuesday, 30Jun09, 2 improved Project 956EM (Sovremenny class) missile destroyers equipped with new YJ-62 anti-ship cruise missiles attempted to close on the Reagan. The 280km-range missile employs inertial and GPS for midcourse flight and active radar terminal guidance. Three Arleigh Burke DDGs, DDG-99 Farragut, DDG-102 Sampson and DDG-106 Stockdale intercepted the 2 Chinese missile destroyers at a range of 175nm. Missiles were exchanged and one Chinese ship, Fuzhou, was sunk. Aircraft from the Reagan VFA discouraged the second ship which sustained minor damage; none of the American Destroyers sustained more than minor damage. Condition ZEBRA was maintained by all CSGs.

The US protested the unprovoked actions of Monday and Tuesday in the UN Security Council. DHS raised the threat level to red, but the DOD remained at DEFCON 2.

By now, both Paul and Mike had moved anything they wanted to protect ala livestock down to Randy and June's farm.

◦

On Wednesday, 01Jul09, there was no activity from either party to the conflict. Conditions remained unchanged in the United States and China vetoed a measure to censor them in the UNSC.

On Thursday, 02Jul09, the US repositioned two Keyhole satellites to better observe China. Space Command in Cheyenne Mountain reported that the Chinese also repositioned one of their satellites. As far as the rest of the world knew, the US and China were engaged in the classical Mexican Standoff. Tony Blair was long gone from the political scene and more recently, relations between Britain and the US were, ah, strained.

On Friday, 03Jul09, data acquired by the KH-12 satellites suggested that the Chinese might be prepping their fleet of ICBMs. The US had forward based the entire fleet of 18 nuclear capable B-2 bombers on Guam. Space was made in available hangers because it wasn't anticipated that the bombers would remain at Andersen AFB under the care of personnel from the 509th Maintenance Group for very long. They would either attack China or return home. A decision had been made that, if necessary, the bombers would be employed as a first strike weapon.

◦

On Saturday, 04Jul09, The KH-12 satellites observed Chinese Forces moving the DF-5 missiles to their out-of-tunnel positions and being erected. The DF-5 is a liquid propellant missile with a range of ~13,000km. The fueling operation apparently requires about

two hours and there was no evidence of the missiles being fueled. The Chinese also had DF-41, 3-stage solid fueled rockets that had been delivered earlier than the west had anticipated. The newest missile had a range of ~15,000km. It has always been a question of when, not if.

At 0001 hours on 05Jul09, the President issued orders to the 509th Bomb Wing to engage and destroy the Chinese missile sites. Close only counts in horseshoes, hand grenades, dancing and nuclear weapons. The Chinese had an observer on Guam and he saw the planes take off. On Guam, the time was 18:30 hours, local. The observer advised his Command authority that the bombers appeared to be headed northwest. Guam is an island in the Northern Mariana Island Chain, and is about 2,500 miles southeast of Beijing.

The B-2 Spirit is high subsonic in nature and the flying time from Guam to China could be ~7 hours. If my math is correct, that means the Chinese had 5 extra hours to fuel their DF-5 missiles and launch them. Who struck whom first? Does it matter?

◦

Aug 8-9 1942 – Battle of Savo Island: Vice Adm. Mikawa sorties from Tabaul under orders from Admiral Yamamoto to break up the invasion of Guadalcanal with a force consisting of the heavy and light cruisers and a destroyer. Entering Ironbottom Sound shortly after midnight unobserved by American picket destroyers, Mikawa inflicted one of the worse defeats in this history of the US Navy, sinking four cruisers, USS Astoria (CA 34), HMAS Canberra, USS Quincy (CA 39) and USS Vincennes (CA 44) without suffering significant damage to a single vessel of his own. Fortunately for his enemies, he then threw away the fruits of victory, he left the scene without molesting the American amphibious forces that he has just rendered, defenseless.

Oct. 12, 1942 – Battle of Cape Esperance: A Japanese force of three heavy cruisers and two destroyers under Rear Admiral Aritomo Goto was sent to escort a troop convoy to Guadalcanal and afterwards bombard Henderson Field. A few minutes before midnight it was intercepted by Rear Admiral Scott's Task Force 64, consisting of the heavy cruiser USS San Francisco (CA 38) and light cruisers USS Salt Lake City (CL 25), USS Boise (CL 47) and USS Helena (CL 50), and five destroyers. The Japanese cruiser Furutake limped away from the action to sink a few hours later, as did the US destroyer USS Duncan (DD 485).

Either event could be the basis for James Bassett's novel *Harm's Way* (1962) which was the basis for the movie, *In Harm's Way* (1965). Bassett entered the US Navy as lieutenant junior grade in February, 1941, and went on to become public relations officer for Fleet Admiral William F. Halsey.

◦

The New York Yankees celebrated *Lou Gehrig Day* on July 4th, 1939, between games

of a holiday doubleheader against the Washington Senators. Seventy years later, to the day, the EAS was activated by the President to announce the end of the American Dream.

*My Fellow Americans,*

*Tension has escalated in the South China Sea. Despite our appeal to the United Nations Security Council, the UN is powerless.*

*National intelligence estimates show that the People's Republic of China intends to attack this great nation within a matter of hours. Satellite reconnaissance shows their DF-5 ICBMs, capable of carrying either a 5mT weapon or Multiple Independently-Targeted Reentry Vehicles poised for fueling.*

*In addition, the Chinese have the DF-31 missile with a range of 8,000km. We had anticipated deployment next year of the DF-41 with a range estimated to be 15,000km. Our estimate was wrong and the Chinese have fielded no less than 24, and possibly more of those rockets carrying MIRVs.*

*I cannot tell you if steps we have taken to preclude a nuclear exchange have been successful. As of this moment, the Space Command in Cheyenne Mountain has not detected any launches. If we fail in our efforts, we can expect multiple weapons directed at the United States.*

*Radiation decays at a predicable rate and, depending on your location, should we be attacked most of you will have to shelter for a period of not less than 14 days. If, and when, launches are detected, the Emergency Alert System will be reactivated to notify the nation.*

*Effective immediately, I am invoking price freezes on all goods and services by Executive Order.*

*Steps are in place to insure a continuity of government in the event we are attacked. Military units will respond to areas in need of assistance as soon as is practical. In that event, Posse Comitatus and the Writ of Habeas Corpus will be suspended by Executive Order. President Lincoln suspended Habeas Corpus in 1861 at the beginning of the Civil War, and his decision was upheld by Congress – despite protests by Chief Justice Roger Taney that such suspension was not within the powers of the President. I will do so with a heavy heart.*

*As of this moment, we have not been attacked and I have recalled our Carrier Strike Groups to their home ports, discretion being the better part of valor.*

*I ask that all Americans join in a moment of silent and offer a heartfelt prayer that this announcement has proven premature. Please stay turned and representatives of the Federal Emergency Management Agency will offer suggestions about sheltering in*

*place. If you are unable to provide your own shelter, your local community has made preparations to shelter significant portions of their populations.*

*God Bless America.*

◦

June began to cry silently and even though I had expected this news, it didn't make it palatable. I asked June to call Marilyn and Rachel and confirm that they heard the broadcast. I had a few chores to attend to immediately, most dealing with the stock. I went to the barn and confirmed the automatic water system was properly functioning and the cattle, hogs, horse and chickens had ample feed for at least a week. People began drifting in, Paul and Marilyn were closest and they were here in 10 minutes with Don. Next to arrive, in 2 vehicles were Mike and Rachel with Sandy, followed immediately by Susan and Ray.

First things first, we had to move hay into the sole remaining doorway into the barn and cover it with a tarp weighted down with concrete blocks. Mike assured me that unless we received an EMP attack, their power would remain on. Otherwise, all bets were off. Paul said that he cut off the main power and was feeding power to essential equipment with the wind turbine. Because I had a 200amp automatic transfer switch and emergency lighting in the shelter, I figured we'd be in good shape.

Don and Sandy said they would take the cots, should it come to that and perhaps we should make a meal of whatever leftovers were available. All 3 women had cleaned out leftovers from their refrigerators and brought them along. We stay glued to the TV while the ladies laid out a buffet of various leftovers. I shouldn't have purchased a big screen TV, EMP would totally destroy it, but Paul said that no more than it weighed, we should take it to the shelter along with our combination VHS/DVD player. News was news and we could bring the black and white up from the shelter.

This was surreal, expecting at any moment for the EAS tone to interrupt the commentary on CNN only to tell us that the attack had been launched. I didn't recognize a single familiar face on the news; CNN must have switched to an alternate studio and was using 2nd and 3rd stringers to handle the commentary. More than once they announced another guest, only to later announce that the individual was out of reach.

"Paul, what did you do with your ham equipment?"

It's in a metal box inside a metal cabinet in our storm shelter and the door is strongly secured. Did you remember to disconnect your antennas?"

"Crap, I'll do that now and put the comm gear in the metal storage cabinet. Did everyone put the weapons in the gun cabinet?"

A chorus of positive responses indicated that they had. I stored the comm gear,

grounded the antenna feeds and returned to the news. Perhaps 4 bites into my sandwich, CNN was interrupted again with the EAS screen. On screen was a General officer identified as a member of Space Command in Colorado Springs. Multiple launches had been detected and anyone who had not already taken cover to urged to do so, immediately.

Paul grabbed the black and white heading for the shelter. We quickly locked up, went to the basement and from there to the shelter. Don gave me a hand with the blast door and we resumed watching TV in the shelter. Things went from surreal to unimaginable when someone decided to show the actual tracking maps from Space Command. It was rather reminiscent of *War Games*, although slower. Do you recall the scene where the computer was persuaded to play tic-tac-toe?

Even before the first strike was displayed the generator kicked in and moments later, we lost our TV signal. Happy 4th of July. We had missed the date and time by only a few hours and it came earlier than expected. The shelter was occupied with 10 disbelieving people, me as much as the others. So much for prepare for the worst and hope for the best. The US had declared its Independence on July 4, 1776. It mostly lost that independence on July 4, 2009. 233 years, not a bad run for the typical Democracy, but we were a Republic, or rather had been.

Having planned on a picnic with our 3 families, we had the typical picnic fare and could probably avoid accessing our survival food supplies for a couple of days. Sometime in the not too distant past, I made a list tasks to accomplish if we ever found ourselves locked into the shelter. First and foremost was to install the special filter in the LUWA system. The second order of business was to once again verify that all of the equipment was working and the final item on the list was to turn on the CD V-717 and recharge and pass out the dosimeters. The KI could wait until we had some radiation readings and knew where we stood.

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"I never really thought I'd find myself sitting in culvert and eating fried chicken," Mike observed. "What in the name of Heaven happened?"

"You saw the screen from Space Command. You know what happened, the Chinese launched on us and presumably, we responded," Paul replied.

"Maybe I asked the wrong question, Paul. I guess I'm asking what went wrong and when. I mean the Country in general. There was a time when everyone wanted to be an American."

"Not everyone and not always, Mike, remember the Marine Corps Hymn? It starts, From the Halls of Montezuma, To the Shores of Tripoli. Following the war with the Barbary Pirates in 1805, when Lieutenant P.N. O'Bannon and his small force of Marines participated in the capture of Derne and hoisted the American flag for the first time over a for-

dress of the Old World, the Colors of the Corps was inscribed with the words: To the Shores of Tripoli. After the Marines had participated in the capture and occupation of México City and the Castle of Chapultepec, otherwise known as the Halls of Montezuma, the words on the Colors were changed to read: From the Shores of Tripoli to the Halls of Montezuma. Following the close of the Mexican War came the first verse of the Marines' Hymn, written, according to tradition, by a Marine on duty in México. For the sake of euphony, the unknown author transposed the phrases in the motto on the Colors so that the first two lines of the Hymn would read: From the Halls of Montezuma, To the Shores of Tripoli."

"Since its very beginning, the United States has forced its will on others. No matter how noble the cause, we were exporting Democracy, using our money and military to accomplish it. The Monroe Doctrine is the principle of American foreign policy enunciated in President James Monroe's message to Congress, Dec. 2, 1823. It initially called for an end to European intervention in the Americas, but it was later extended to justify US imperialism in the Western Hemisphere."

"But this was a nice place to live at one time."

"It will be again, this is nothing more than a monster growing pain," I butted in. "You can expect to see a period of isolationism. We projected power with our CSGs. From what I can discern, they're intact. For the next generation, expect to see the Country focused inward and those mammoth machines used to isolate us from others."

"Would you stop it," June insisted. "What difference does it make?"

"I'll answer that," Paul responded. "In 1905, George Santayana, in the first volume of *The Life of Reason* titled *Reason in Common Sense* said, *Those who cannot remember the past are condemned to repeat it*. In plain English it says that we have to learn from our mistakes."

"So what? How much can a Country endure? If we had effective politicians and diplomats, this conflict could have, or at least should have, been avoided," June retorted.

"As long as we have our nose stuck in everyone else's business, conflict is unavoidable. We must learn to live in harmony with the planet and other people. They can learn of the advantages of our system by example and not have it shoved down their throats."

"Anyone want more chicken?" Marilyn asked, trying to change the subject.

o

"When should we set up the radio, Paul?"

"We'd better wait a day or so, Randy. We don't really know if the attack came in a single wave or multiple waves. Did you remember to yank your radios from your pickup?"

"They're in the cabinet with the Kenwood."

"Could you switch from the generator to the Wind turbine and save fuel?"

"We've been so busy I didn't have time to do more than put a manual transfer switch in the well house. Maybe I can do that when we go topside to check on the livestock."

The 3 of us worked out a schedule with 4 on and 8 off. It was important to monitor the radiation level showing on the CD V-717. In a weak moment, I had purchased a second and it measured the radiation level in the basement while the first measured the radiation level at or near ground level. One of the biggest concerns seemed to be the lack of privacy, especially for the ladies.

We didn't reprise the discussion about the Country and what had become of it. Even among friends, there isn't a uniformity of opinion and opinions are like buttholes, everyone has one. I noticed that Don and Sandy seemed to be getting along very well. They would make a nice couple, someday.

As the crow flies, Lakin is 200 miles from Colorado Springs on a heading of east-southeast or  $\sim 107^\circ$ . It's downhill all of the way from there to here, the Springs is at 6,008' elevation and Lakin is 3,001'. If I assumed that the Springs was the nearest strike, and the average wind speed was 15mph, the earliest we could expect fallout would be 13 hours.

"Paul, the survey meter is clear. I think I'll run up and switch the transfer switch to the wind turbine and check on the livestock."

"I come with you."

Before we had decided, the 5 men would go topside briefly to check on things and the ladies would do a quick run through the house. Sandy would take over monitoring the survey meter.

"If you moved those wires from here to there, you could automatically switch between the wind turbine and the generator, Randy."

"I don't like working on hot circuits."

"I'll do it," Mike volunteered.

Everything was fine in the barn and by the time we returned to the well house, Mike had disconnected the main power feed and connected the wires from the wind turbine to the automatic transfer switch. Although I had moved the generator to the basement, the switches had remained in the well house and I ran wires. No, the generator wasn't fouling the air in the basement, I extended the intake and exhaust; I'm not totally stupid. I'd

built a small room to house the generator and had insulated the walls and used a sound absorbent material to cover the inside walls. I ran the intake and exhaust out a window through a pile of sandbags. I had always intended to do something more permanent, but never found the time.

We checked the vehicles and they started just fine, we hadn't had any EMP. Because we had time, I got the CD V-715 from the shelter and told Sandy to come topside until we got the first indication of radiation. The generator had shut down when it sensed the electricity flowing from the wind turbine.

"Damn!"

"What?"

"I forgot my meds," Mike announced. "I've got to run home and get them."

"Take the survey meter and a gun with you and please hurry."

"I'll ride shotgun," Paul offered.

"And I'll go back to the shelter and keep an eye on the survey meters."

"Are you sure it is safe?" Rachel asked.

"We shouldn't get radiation for a few more hours Rachel. I doubt they'll need those guns, but it's better to be safe than sorry."

We weren't in Denver or Colorado Springs. Only God could help the people in the cities the Chinese elected to strike. We knew nothing of the preemptive strike the President ordered. The B-2 Spirit bombers were barely halfway to China when the balloon went up and they were recalled to Anderson AFB. There was more than enough blame to go around and it would later be determined by a Congressional Committee, that it was impossible to say to any degree of certainty which Country had started WW III.

Now is as good a time as any to discuss that. The Chinese rolled their DF-5s out of their protective tunnels and erected them but didn't fuel them. In response, the US launched a preemptive strike from Guam. That forced the Chinese to fuel the DF-5s. It was nighttime in China and we couldn't see them fueling the missiles. They launched missiles first and we followed immediately. We launched from the Ohio-class subs and the fly time on our missiles was far shorter than the fly time on their missiles. The first weapon that exploded was made in America. You figure it out and I'll take a Tylenol.

o

"Get everything?"

"That was stupid, what if we hadn't had time to go back for my meds?"

"I could have probably substituted something; it depends on what your problem is."

"High blood pressure."

"I have Verapamil, that's generic Calan. Not the best, but not the worst. What do you take?"

"Diovan HCT."

"Better med, do you have enough?"

"Six-month supply."

"I'd probably have to substitute Verapamil and generic Dyazide (Triamterene and Hydrochlorothiazide). It is better if you take your own medication. I have some physician's samples of Diovan I got from Doc Williams, but it depends on which one you take."

"80/12.5."

"In that case, you have a one year supply."

We concluded that we'd better spend the night in the shelter. It wouldn't do to have the cloud of fallout show up while we were sleeping. We had made a complete circuit of the 4 hour watches and I was back on when the survey meter began to indicate we were getting fallout. I made a note of the time and the level and we would continue to note the time and level every 15 minutes for the foreseeable future. I had downloaded an Excel spreadsheet from the internet and once we had a few readings to plug into the computer, we'd have a pretty good idea when we could expect to leave the shelter. I'd know way ahead of time when we needed to start the  $KIO_3$  and everyone would be able to leave the shelter at the same time.

I'd managed to persuade Doc to write me a non-refillable prescription for chill pills, alprazolam 0.25mg quantity 1,000. That made the pharmacist sit up and take notice, let me tell you. He even called Doc to verify the prescription. He gave me his newest sealed bottle. It didn't matter; the stuff had a shelf life of just short of forever. June and I figured that after a few days in the shelter, we'd have to open the bottle and pass out pills to reduce the growing anxiety.

## An Unlikely Outcome – Chapter 10

Remember the deal that Bush made with India? A key factor behind the nuclear cooperation agreement reached between the United States and India was a simple trade-off: The White House was willing to risk losing ground in the worldwide campaign to limit the spread of nuclear weapons for a deal with India that could help it counter the rising power of China. Huh? In a world with 20,000 or more nuclear weapons, it was never a question of if they would be used, only a question of when and by whom. Surely no one in the US ever thought that the 3rd nuclear weapon detonated in a war would be stamped, made in the USA, an unlikely outcome.

The deal ultimately allowed Iran to develop nuclear weapons. Eyes were turned towards the Middle East, awaiting what many considered the inevitable exchange of nuclear weapons between Israel, who of course didn't admit to having nuclear weapons, and one of the Muslim countries, who of course didn't admit having nuclear weapons either. Like Gomer Pyle used to say, "Surprise, surprise, surprise."

o

On the 3rd day in the shelter, Paul asked me, "What do you think, Randy?"

"Paul, I'm trying not to think, to tell you the truth. The harder I think, the worse my head aches. I can give you a few facts, however. The fallout peaked 7 hours ago at ~360R/hr. I initially thought it peaked earlier, but we must have gotten some more radiation from somewhere else. The current reading is ~36R/hr. In 42 hours, it should be ~3.6R/hr. When that happens, I'll plug the data into my spreadsheet and determine when it will theoretically be safe to egress the shelter permanently. Under the 7/10 rule, we'll be at 320mR/hr at 343 hours and 32mR/hr at 2,401 hours."

"What is the protection factor of this shelter?"

"The top of the shelter is 2' higher than the basement floor, and therefore covered by 8' of dirt.  $96" \div 3.6" = 26\frac{2}{3}$ . Our protection factor is 10 to the  $26\frac{2}{3}$  power or 100 million plus." [A more conservative estimate returns a value of 179,615 and either way that is more than enough.]

"Wow."

"You know, I really didn't need to build it this deep, but I wanted to be able to compact and level the ground so there would be no sign of a shelter. Roy got to digging and I asked how deep he could go. He said 18' and I needed space for the waste tank, so I told him to just go as deep as he could. I later thought better of it and the waste tank is under the floor. The culvert is 10' in diameter, leaving it 8' below normal ground level. I put the culvert in, installed the tanks and built the floor. The outside is filled with rock to the midlevel of the culvert and dirt thereafter."

"And you built this expecting a nuclear war?"

"Like I told you when you helped weld on those endplates, I built it expecting tornadoes, but wanted it to be able to withstand radiation in case of a nuclear war. A person should plan for the worst and hope for the best."

"Back to my original question, when can we leave?"

"Best guess is about 36 days from the radiation peak. We should be fairly close to 100mR. However, we can go out briefly in 42 hours to tend to the livestock. Susan and Sandra shouldn't go out for very long at a time, once we do go out, they're child bearing age."

"Sandy is only 15!"

"That should apply to Ray and Don as well."

"So you've paired Don off with Sandy?"

"No, but I am a good observer."

o

Just to be extra safe, we planned to stay in the shelter 38 days after the radiation peaked, a total of 41 days. Only Mike, Paul and I went out to take care of the livestock. The animals were restless being cooped up in the barn, but we agreed that we couldn't let them out. Their protection factor, using the survey meter readings as a basis was about 100. The dairy cows would only ruin their milk if they ate contaminated grass, so Mike said he'd keep them on hay when he took them home.

"When are we going to be able to pasture those animals?"

"I'd recommend that we dry lot them for a while. There is bound to be residual radiation on the grass and we'll have to wash it off. We might even have to use my tractor and blade and scrape off an inch or two of dirt and replant. If I'm correct on my calculations, we'll be out by August 4th."

"Man, it's really going to depend on the weather, isn't it?"

"Yes, and I'd say we can expect an early winter with all of the ash, dust and smoke in the air."

"The sky looked reasonable clear to me, Randy."

"If we were topside at sunset, you'd probably change your mind. The sunlight reflects of those particles you can't see and turns the sunset into the bight hues you sometimes

see. The red hues of the sky at sunset are caused by the Rayleigh scattering of blue light by atmospheric dust. Relatively little red light is scattered in this way, and so the sky often takes on shades of red, orange and yellow. The color of a sunset may be enhanced by atmospheric phenomena such as clouds, smoke and smog produced by natural processes or human activity, and by ash from volcanic eruptions. A number of eruptions in recent times, such as those of Mount Pinatubo in 1991 and Krakatau in 1883, have been sufficiently large to produce remarkable sunsets (and sunrises) all over the world."

"There you go again."

Red sky at night, sailor's delight. Red sky at morning, sailor take warning... The origin of the saying is unknown, although a form of it appears in the Bible (Matthew 16:2-3). It has some basis in science and is a fairly good predictor-though no guarantee-of weather at the mid-latitudes in the Northern Hemisphere, where storm systems generally follow the jet stream from west to east. A red sky in the morning indicates a sun rising in clear eastern skies casting its rays on storm clouds approaching from the west. At night the clear sight of the red setting sun would tell a sailor that no storms are to the west. The likelihood of rain falling within 24 hours of an excessively red sunrise is 61% in winter and 70% in summer. Likewise, bright sunsets are followed by 24 hours of dry weather 71% of the time in winter and 57% of the time in summer.

o

By the end of the second week, June began passing out the anti-anxiety drugs. Mike, Paul and I passed; we'd been out twice now to take care of the livestock. Nothing really looked much different. There was a fine coating of ash/grit on everything; it must have been the fallout. We weren't tracking it because we put on our rubber boots before we left the screened in front porch.

"Randy, do you always make lists?"

"If I have more than one thing to do, I find that it helps me prioritize things and not forget, why?"

"No reason really, list making is one of the traits of an obsessive-compulsive person."

"Would that be like getting focused on a single task to the exclusion of all others?"

"I suppose it could."

"In that case, Paul, I guess I'm a bit obsessive. I have been known to make a purchase if I had the money in my pocket and really thought that I wanted the item. Maybe that's the compulsive part. But, my name is still Randy, no matter what kind of quirks I may have. Doc Williams would have said something if I had a personality disorder. If you want to read up on it, I may have an old copy of the DSM IV."

We had taken the radio out of the cabinet after we been outside the first time. Any earlier might not have done much good and if there were going to be attacks, they would have happened by now. Don't let me confuse you, I counting from the fallout peak, not from when we actually went into the shelter. In other words two weeks was 17 days after sheltering but only 14 days after the fallout peaked. The wind had been either out of the west or the west-northwest, accounting, perhaps for the fallout we received. There for a while, my remote weather instrument indicated the wind was blowing in right from Denver. That's a boy-toy commonly found in a Ham shack. Paul has one, too.

o

We listened to the Ham bands, but the ionization was really interring with the signals. The first real call we had was from Lakin. It was Doc Williams on the county fire Department radio. We hadn't been assigned a unit number.

"Randy, this is Doc, are you there?"

"Hey Doc, how are things in Lakin?"

"About what one might expect, not good, but they could be worse. I need to know how many people you have in that shelter of yours."

"The Jenkins, the Johnson's, us and the newlyweds, 10 people."

"You haven't heard from anyone else?"

"Negative."

"Do you have a Geiger counter?"

"No, but we have 3 survey meters and the current radiation level is around 300mR/hr."

"Don't come out yet."

"We've been out twice to care for the livestock, but, we took Potassium Iodate and have CD V-742 dosimeters. We're ok and I'm keeping a log I can share with you later."

"Who are we?"

"Mike, Paul and me."

"We're projecting 2 more weeks before it's safe to egress."

"That's about what we figured, Doc, August 4th."

"Do you need anything?"

"Negative, do you?"

"I'll call back in a week to check on you, say the 27th at noon?"

"Someone will be standing by, Doc. Thanks, Webster clear."

"Williams clear."

o

"What's the population of Lakin?"

"It was about 2,000, but since the Pandemic and terrorists, I'm not sure I really know, certainly lower."

"I didn't hear Doc say anything about casualties."

"And I didn't think to ask. Maybe he'll have a better idea after he finishes his census."

Lakin is 182 miles from Hutchinson, 184 miles from Pueblo, 192 miles from Amarillo, 202 miles from Colorado Springs and 207 miles from Salina, KS. The closest major metropolitan area is Denver at 284 miles. The closest major military target was in and around Colorado Springs. Northcom is located at Peterson Air Force Base and NORAD is also in Colorado Springs. The best description of their locations starts at the Colorado 86 interchange with I-25. From there, Northcom is about 6 miles NE and Cheyenne Mountain 6 miles SW and a line drawn from Northcom to Cheyenne Mountain would cross I-25 near the interchange.

There were worse places to be than Lakin, Kansas; Colorado Springs, for example. One DF-5 armed with a single 5mT warhead could kick the crap out of Cheyenne Mountain. Destroy it? Maybe not, but those buildings would be rocking on their springs. The underground Combat Operations Center (COC) was designed to ensure 70 percent probability of continuing to function against a five megaton weapon with a three mile circular error probability (CEP), be self-sufficient for brief emergency periods, have backup communications and television intercom with related commands, limited, but adequate, sleeping facilities are available within the main Complex for use during button-up exercises or actual emergencies, and protection against fallout and biological and chemical warfare. The facility was ultimately designed to withstand a multi-megaton yield weapon at a range between 1½ nautical miles. Performance criteria changed as design and construction progressed to better provide for shock-mounting of the interior buildings and protect against electro-magnetic pulse (EMP). All connections between buildings and components were to be designed for the required flexibility to remain functional. Blast Doors to close and protect the complex from blast and overpressure were required. The initial design criterion was based on the stated assumptions concerning the

yield and accuracy of future Soviet weapons and acceptable risks.

With the wind frequently out of the northwest, the relationship between the locations of Lakin and the Springs was of more than a passing interest. Still the radiation continued to fall and nearly on schedule, they finally left the shelter but not quite for good. The older men discussed the fact that there was one young family with the possibly of two that represented their future. Don and Sandy were starting out right developing a good friendship. Whether or not it would develop into something more remained to be seen.

◦

Any attempt to describe what it was like after a nuclear war was an exercise in futility. It depended on where you were, where that was in relation to the targets and even the makeup of the nearest community. Compare being in southwestern Kansas, a few miles from the County seat with a population circa 2,000 to being 50 miles northeast of Los Angeles with a population of 15 million plus where numerous weapons were delivered. There were more people in Los Angeles than the entire state of Kansas. As far as that goes, there were maybe more gang members in greater LA than people in Kansas.

Farmers in Kansas were more concerned with having their anhydrous ammonia stolen than being attacked by a gang. Farming didn't have to change a lot to return to the methods of a half century earlier. They used manure for fertilizer and rotated their crops. All this talk of regressing 100 years or more assumed we lost the ability to operate and maintain the equipment we had. Maintained, the equipment required petroleum products and an occasional small part, e.g., filters and lubricants.

Take a mounted sickle mower for example, one spare sickle bar, some blades, rivets and ledger plates and with care, the mower would last for a long time. The more complicated the machine, the more difficult the maintenance. My old Ford tractor, a 900 series row crop build before I was born, worked fine and it was a diesel, one of the first diesel engines Ford built. I had records of the parts needing replacement over the years and had accumulated spares. Some were becoming hard to locate and when you found them you bought 2 sets.

June and I grew hay and a large garden. I usually got 3 good cuttings and since the farm was free and clear, it was enough to live on. We had boarded horses up until we took on the EMT training, but there are only 24 hours in a day. When Dad died, I got the farm and a not insignificant inheritance. He had a good insurance policy on mom when the cancer ate her up. He hadn't adjusted well and although he died in an auto accident, I blamed the drinking.

◦

On August 4th, I was reading ~90mR and we all went out on a semi-permanent basis. In his follow-up call, Doc suggest we'd better wait for ~ 50mR before the young people slept upstairs at night and that was 2 months down the road.

Our first chore was washing down the residual radiation and burying it. With the farm area cleaned up, we used the blade to scrape off the dry lots and turned the livestock out. We worked our way from our place to Paul's and finally Mike's, completing one task at a time. Both had brought a fair amount of hay and that had to be reloaded and taken back home.

What is Labor Day, the first Monday in September? Right, anyway we had a picnic to celebrate having the homesteads cleaned up. Mike had a mounted rototiller and did the three pastures. Paul disked, I dragged and Ray and Don planted a grass mixture. It wouldn't grow much but it would produce a little grass for Mike and my horses and Paul's livestock. We'd plant alfalfa in the spring and I could probably get an early cutting.

"Paul, why don't you plant the livestock feed this coming year and Randy and I can produce food for the people in town to eat?"

"Mike, we don't have the right equipment for that."

"True, but I'll bet a lot of the town folks would be more than willing to work for a share of what we produce. We can go with the more basic items like potatoes, onions, corn, green beans, carrots, cucumbers and maybe some squash. I generally grow a fair amount of wheat and oats and will continue those crops."

Paul had the only manure spreader and before winter set in we wanted to clean out the barns and get that spread.

"What about my dairy cows?"

"The only thing that comes to mind is strontium-90 and it has a half-life of somewhere around 30 years. It gets into milk and replaces calcium in the body. Oh, I see, we'd better scrape the soil off the field you plan to plant hay for the cattle on, Paul. We can rototill it after."

"Are we forgetting anything else?"

"Well, the last time we had a nuclear war, everyone died and Strontium-90 wasn't a problem."

"Har, har. A little of that will go a long way."

"I'll tell you what, weather permitting, we'll scrape the 3 pastures and you can use my tractor to scrape the field you use to produce hay. We'll rearrange the tasks we outlined and shoot for having it all done before first snowfall."

"How long do you think we have?"

"I'm not a meteorologist, but surely winter will be here by October, possibly earlier. Let's assume the first day of fall, September 23rd or thereabouts."

That's a lot of grading."

"The only other choice would hire someone to come in with an earthmover and scrape off an inch of topsoil. I have no idea what that might cost or even if an earthmover would be available."

"Couldn't we do it with a road grader?"

"Check it out and see, you know that just might work."

o

Kearny County couldn't spare a grader; they had to get the roads ready for winter. A contractor suddenly found himself without work and was more than willing to grade an inch off the fields, if they could supply the fuel. He had to lay everyone off and seriously needed whatever income he could find. The best he could do was grade the soil to the side of the fields, removing it would be their problem. He told them that with any kind of luck, he could have the 3 farms graded by first snowfall.

Early crops had been harvested from the garden before and some of the remaining vegetables, root crops, could be used. But some of those above ground veggies were just tilled under. They weren't desperate for food, this year. When he could work it into his schedule, the vet checked the livestock and pronounced them fit. Once they had cleaned off the dry lots, the livestock was loaded up and taken back to Paul and Mike's farms. The 3 of them still burned stoker coal in their furnaces and it was that time of year, or soon would be. Most folks used locally produced natural gas and the coal was hauled by rail from Colorado or Wyoming and then trucked to the dealer. He bought early this year because of the Pandemic.

"Can we convert those furnaces back to burning wood?"

"If we have to, yes. You think coal is going to be hard to get?"

"Paul I think more things have changed than we ever could have imagined. If the dealer has extra coal, it might be a good idea to stock up. How is he going to order more? There is no Western Union anymore; the phones are down and therefore the internet. When was the last time you got a letter or a bill in the mail? The Country has ground to a halt since Independence Day."

"Some things are improving, the electricity is back on."

"We really don't need that, not with the wind turbines. I'd like to recover my investment

in that equipment so I never switched back to commercial power. Were you planning on going back to commercial power, Paul?"

"No, but I was just saying..."

"That they've managed to restore the one utility we really don't need."

"We should have local phones back up sometime this week."

"That will be nice. I had expected to see refugees from Colorado by now."

"The Sheriff has roadblocks set up at the county lines on US 400 and on Kansas 25 south."

"There won't be anyone coming up on 25, he's wasting his resources. I suppose it gives the Deputies something to do."

o

We busted our humps getting the land graded and plowed. We only disked and dragged the land we wanted to plant in grass seed. We wanted new crops of grass for our various livestock and for the land to lie fallow, ready to plant come spring. I tried to get the diesel tank topped off, just in case, after the fields were graded, but the dealer in Lakin laughed and said, "No mas," then winked. He had the diesel I wanted, for \$6 a gallon. June and I didn't want to spend that kind of money, so I decided to pass.

Still, our freezers were fairly full and food wasn't an issue. I got our mares bred figuring horses would be worth their weight in gold in coming years. I had never gotten around to buying gold. June and I had invested our money in a limited medical education. In many ways, life in southwestern Kansas hadn't changed even though the Chinese had nuked the Country halfway back to the Stone Age.

Those last days in the shelter, Mike, Paul and I had basically agreed to go back to farming as our fathers' had, and I alluded to earlier, crop rotation and natural fertilizer. However, unless we could do something about finding some affordable diesel fuel, we end up farming with horses and that's very hard work. We could replace the tongues on wagons, but soil preparation would be a royal pain in the butt. No, anyway you looked at it, we have to get diesel somewhere.

Clearly the dealer heard of the law of supply and demand, he wasn't selling much fuel at \$6 a gallon and he had bills just like everyone else. When he came down to the pre-war price of \$5 all 3 of us jumped on it and told him if he could sell us some in drums or if he had any affordable used storage tanks we could rent, we'd buy more. I figured I'd better buy more gasoline, too, before the lack of supply caught up with the lack of demand. That inheritance was looking smaller and smaller. Another CD, Certificate of Deposit, bit the dust.

"Randy, I'm cutting back next year and have decided to truck farm. The grocery stores in Lakin aren't getting anything in the way of food and anything they don't want, I can sell at the Farmer's Market."

"Do you have heirloom seeds to do that?"

"Marilyn talked to June and we ordered scads this past spring. When the kids got married, I said something to Mike and he got seeds when he went to Garden City to buy those guns. How about you?"

"We got a case of those #10 cans from Walton. Can't say that I've ever eaten Swiss chard though. Anyway, we loaded up in Garden City too. We vacuum packed those seeds using a seal a meal and it helps to store them in a dark place. I did manage to swap my anhydrous tank for a 1,000 gallon gasoline tank, but 4 horses don't produce much manure."

"I can bring a few spreader loads if that will help."

"Bring all you can spread, Paul. Were you planning on increasing your herds?"

"I'm caught between a rock and a hard place Randy. If I increase the herds too much, I won't have any ground to truck farm."

"Maybe we can work something out. How about I buy some cattle and hogs?"

"Mike wants some too, so maybe I can increase the overall herd and the two of you can take the increases. Duncan's locker plant is going to end up supplying all of the beef and pork to the 2 grocery stores in Lakin and possibly the two in Deerfield."

"That will help solve my fertilizer problem. I have a big barn so I can handle a couple of dairy cows, and that will let me slowly build a herd if I only butcher the steers and keep the heifers. Should we be looking for draft horses?"

"I've already looked, before the war. I don't know if they're still there, but Lone Star Ranch outside of Kansas City sold draft horse and carriages. I printed a copy of one of their ads."

## An Unlikely Outcome – Chapter 11

LONE STAR RANCH CARRIAGE CO. LLC, Paola, Kansas, offers for sale several teams of PERCHERON and BELGIAN horses. We have some carriage broke horses and farm teams and singles. We also have several 30-passenger wagons, Vis-a-vis, trolleys, etc.

"Here's another ad from the same publication:

CLYDESDALE MARES bred to Tartan Drummer. Also one 3-year-old sired by Drummer. McGilvray Farms, Bird City, Kansas."

"Bird City is closer, but it's straight east of Denver. I haven't heard whether they hit Kansas City. I'd say we ought to try Paola if we're going to be getting draft horses. It's maybe 420 miles, but if you want to try Bird City, it's only 140 miles."

"I talk to Mike and see what he thinks, Randy."

o

A decision wasn't long in coming. Mike thought that we should stay as close to home as possible. Although Paola was 3 times further, in normal times the drive was only twice as long as the drive to Bird City, mostly due to better roads. Mike said we'd have to pass a lot more communities if we went to Paola. If the other counties were behaving anything like the Sheriff of Kearny County, making us stop and explain every time we crossed a County line, the trip to Paola could take forever.

There was no roadblock on north 25 so Mike thought we would get to at least Leoti before we even saw anyone. It was nearly perfect, rural Kansas roads bypassing most towns and given the circumstances, probably few people out and about. We only had one horse trailer, Paul's 4-horse trailer. Mike said he knew where he could borrow two more. I recalled seeing some when June and I did the immunizations, but couldn't recall where. Their vehicles could handle a 4-horse trailer, but I doubted my old Dodge could. Oh well, just because the trailer has 4 stalls, doesn't mean you have to use them all.

Other planning included bringing Ray and Don along and having all of us equipped with the M1A rifles, short barreled shotguns and .45 pistols. Sue said Ray couldn't go unless she could come. We weren't sure what to expect for prices, they could vary from \$1,000 to \$4,000 per horse. There was also the issue of finding the McGilvray Farm once we made it, presumably, to the Bird City area. H.C. 2, Box 18 wasn't much in the way of directions.

The matter discussed in depth (argued), the 6 of us set off the following morning on northbound Kansas 25, 2 persons per truck, each pulling a 4 horse trailer. We made it in 4 hours flat and didn't see a single soul the entire way. We asked around in Bird City and eventually got directions to the farm. Mike and Dona raise some of the finest

Clydesdales around, bred from some of the finest stock. Their horses have consistently placed in stock shows, and are a prize winning breed.

Mike also builds the wagons that his Clydesdales pull and he has become a master of his craft. If it is a new wagon you want, or perhaps you want your wagon restored, Mike is your man. And, he weren't no spring chicken.

"Howdy."

"Are you Mike McGilvray?"

"Might be. Whatcha want?"

"We understand that you sell Clydesdales."

"If'n I'm Mike McGilvray, I do. Come a long way?"

"Lakin, down in Kearny County."

"I know where Lakin is, small town on US 400, right?"

"Right."

"How many horses were you folks looking for?"

"All we can afford."

"Whacha gonna use 'em for?"

"Farming."

"Ain't many folks farmed with horses since the '40s 'cepting the Amish. You folks don't look like Amish ta me."

"We're just regular farmers, but with the war and all, when we run out of fuel we won't be farming, unless we can farm with horses."

"It's hard, ya know, farming with horses. Y'all got any horse drawn implements?"

"Nope." The fella sort of smiled and rubbed his hands together.

"I suppose ya want a stallion and a bunch of mares, huh?"

"Well..."

"I got 12 2 year old fillies and one stallion I might sell ya. I'm McGilvray. 1,500 each for

the mares and \$4,500 for the stallion, cash, gold or silver. I got harnesses and sell wagons too. My chuckwagons are mighty famous."

"How about \$1,000 for the mares and \$3,500 for the stallion?" Mike asked Mike.

"You a horse trader?"

"I'm a farmer just trying to make ends meet."

"Finally offer, \$1,250 for the mares and \$4,000 for the stallion. Y'all know whadda seller's market means?"

"We do. How much extra for the harnesses?"

"We'll call it \$20,000, cash, gold or silver."

"We'll have to come back for the stallion."

"I'll haul him and the tack for ya. How far is it ta where ya live?"

"130 miles."

"Fer piece. Ya got some gas to cover my delivery charge?"

"Yeah. Gas or diesel?"

"Gas."

◦

Author's note: If, by chance Mr. Mike McGilvray happens to read this, no disrespect intended and you just got some free advertising. Nice chuckwagons.

◦

I took the 4 smallest mares; they could wait to get bigger once we got home. Paul said he would buy the stallion and McGilvray said the price include one stud service for each of the mares, if we could provide him gas and lodging. There's never a Budweiser wagon around when you need one. A fully grown Clydesdale horse has a hoof about the size of a dinner plate, a farrier could get rich keeping our horses shod. Having the stud service would enhance our breeding program. And, if that stallion was worth a damn, Paul could make money selling stud services. Horses are usually bred as 4 year olds. We would have plenty of time to build a herd of saddle and draft horses.

The grass was just coming up when we got our first skiff of snow. I hadn't thought it cold enough to snow before October, but not even meteorologists are that good at predicting

the weather. Marilyn invited everyone up for Sunday dinner and we all gather right after noon. We had skipped church this Sunday; lately, the pastor was preaching a whole lot of hellfire and damnation. Hey, I didn't invite those people into the church. Kansas's two primary Protestant religions are Methodist and Baptist at about 14% each and the Catholics count for another 20%. We belonged to the Lakin United Methodist Church, but you probably knew that.

"You should have bought more horses, Paul, 13 is unlucky. You have 2 stallions and 6 mares as saddle horses plus 4 of those Clydesdales and that stallion you bought."

"One of these days, everyone is going to be pleased with how much breeding stock I have. How are the two of you making out with the heifers and pigs?"

"Mine are doing what they always do, eating hay and producing fertilizers. I got some hog feed in town because we don't have anything to feed the hogs," Mike answered.

"I'm in the same boat as Mike as far as hog feed goes."

"I've got corn and soybeans, why didn't you ask me? I could have loaded up a mixed truckload and taken it to the elevator and gotten it cracked. The two of you paid twice what you should have."

"I guess it's a good thing I didn't buy much feed," Mike replied. "Randy, want to go halves on a load of hog feed?"

"Is it any different than cattle feed?"

"We can put together a general livestock feed that's about 15% protein that you can use for both. Then all you have to buy would be some supplements. It should cut your costs dramatically."

"Can't we make our own feed?"

"I don't have a hammer mill."

"I have one sitting in the machine shed that my father used. I've never used it myself. What would it take to use that? I think it's a Gehl."

"If it runs ok, we'd just hook it to the PTO on your tractor, dump in the grain and auger the grain into a wagon."

o

Up to this point in time, late September 2009, nothing had occurred that was totally unexpected by the families. The school district had been able to resume classes a bit late, and not unsurprisingly, they wouldn't allow weapons of any kind on the school grounds.

Most of the kids from outside of town were carrying BOBs and that presented a major problem, especially if the BOB included a firearm, Kansas didn't allow concealed weapons permits, and even if they had, typically most states require a person to be 18 or 21. [Changed, now a shall issue state.]

◦

*An old cowpoke went out on a dark and windy day  
Upon a ridge he rested as he went along his way  
When all at once a mighty herd of red-eyed cows he saw  
A-plowing through the ragged sky and up a cloudy draw  
Yippie aye-aaa, yippie aye-oooh, ghost herd in the sky*

*Their brands were still on fire and their hooves were made of steel  
Their horns were black and shining and their hot breath he could feel  
A bolt of fear went through him as they thundered through the sky  
For he saw the riders coming hard and he heard their mournful cry  
Yippie-aye-aaa, yippie-aye-oooh, ghost riders in the sky*

*Their faces gaunt their eyes were blurred and shirts all soaked with sweat  
They're riding hard to catch that herd but they ain't caught them yet  
'Cause they've got to ride forever on that range up in the sky  
On horses snorting as they ride and hear their awful cry  
Yippie-aye-aaa, yippie-aye-oooh, ghost riders in the sky*

*As the riders loped on by him he heard one call his name  
If you want to save your soul from hell a-riding on our range  
Then cowboy change your ways today or with us you will ride  
A-trying to catch the devil's herd across these endless skies  
Yippie-aye-aaa, yippie-aye-oooh, ghost riders in the sky*

◦

*In the southern part of Texas, in the town of San Antone  
There's a fortress all in ruins that the weeds have overgrown  
You may look in vain for crosses and you'll never see a one  
But sometimes between the setting and the rising of the sun ...  
You can hear a ghostly bugle as the men go marching by  
You can hear them as they answer to that roll call in the sky  
Colonel Travis, Davy Crockett and a hundred eighty more  
Captain Dickenson, Jim Bowie present and accounted for;*

*Back in eighteen thirty-six - Houston said to Travis  
"Get some volunteers and go - fortify the Alamo"  
Well, the men came from Texas and from old Tennessee  
And they joined up with Travis - just to fight for the right to be free ...*

*Indian scouts with squirrel guns, men with muzzle loaders  
Stood together heel and toe to defend the Alamo  
"You may ne'er see your loved ones" Travis told them that day  
"Those that want to can leave now, those that fight to the death let 'em stay."*

*In the sand he drew a line with his Army sabre  
Out of a hundred eighty five not a soldier crossed the line  
With his banners a-dancin' in the dawn's golden light  
Santa Anna came prancin' on a horse that was black as the night ...  
Sent an officer to tell - Travis to surrender  
Travis answered with a shout and a rousin' rebel yell  
Santa Anna turned scarlet, "Play [\*Deguello]", he roared  
"I will show them no quarter, everyone will be put to the sword";*

*One hundred and eighty five holdin' back five thousand  
Five days, six days, eight days - ten; Travis held and held again  
Then he sent for replacements for his wounded and lame  
But the troops that were comin' never came, never came, never came ...  
Twice he charged them to recall - on the fatal third time  
Santa Anna breached the wall and he killed them one and all  
Now the bugles are silent and there's rust on each sword  
And the small band of soldiers ... lie asleep in the arms of the Lord ...*

*In the southern part of Texas, near the town of San Antone  
Like a statue on his Pinto rides a cowboy all alone  
And he sees the cattle grazin' where a century before  
Santa Anna's guns were blazin' and the cannons used to roar  
And his eyes turn sorta misty and his heart begins to glow  
And he takes his hat off slowly - to the Men of Alamo  
To the thirteen days of glory at the seige of Alamo.*

The Late, Great Marty Robbins

o

One enterprising fellow took some of those old 1 foot square lockers and set them up in his store near the school, behind the counter. He only charged \$1 a month, money was tight these days. A student could store his/her BOB in a locker and had to show a student ID to put things in and take them out. Couple could share the same locker and by now, Don and Sandy were getting along quite well. If the Sheriff knew about it, he was turning a blind eye.

"Sandy, one of these days, we're going to look out the window and see paratroopers falling from the sky."

"Watched *Red Dawn* last night, huh?"

"Well, yeah, as a matter of fact, I did. I don't want my name carved on any rock for helping Powers Boothe."

"Russia invading the US through México? I don't think so. Did you hear the report on the radio that the UN is thinking of offering aid to the US and China?"

"And I'll bet they plan to use soldiers to deliver it, right?" Don asked.

"They didn't say."

"It sure is a long time until you graduate."

"Are you in a hurry for something? 'Cause if you're in a hurry for what I think you are, it isn't going to happen."

"Oh that, I guess I can wait."

"Like you have a choice."

Ring... Don was saved by the bell. He did have a choice; Sandy wasn't the only girl in Lakin High School. None of the town girls seemed to have the same interests that he did, while Sandy and he went together like a pair of gloves. It would really feel strange, if it came to that, being married to the sister of his brother-in-law. And man, could Sandy ride a horse, he couldn't keep up with her. On the range when they practiced with rifles, they were evenly matched. He had a M1A, she had an AR-15, and he had a XD .45 to her Browning Hi-Power. Mike had given Sandy a .30-30 for a saddle gun and a Ruger Single-six convertible that she carried .22WRM in. Both of Don's cowboy guns were .45 Colt, a 4¾" Gunfighter and a 5½" Artillery model.

There hadn't been any hanky panky and probably wouldn't be, until they were out of school or something changed to alter their circumstances. Some of the town kids had been forced to drop out of school and seek any work they could find; these were hard times and were expected to get much worse. The biggest problem was food, but Kearny is a small County, population wise, and folks were working together to make do.

o

When he'd delivered the Stallion and tack, Mike McGilvray had been very informative about what to feed draft horses when you worked them in the field.

"Them Amish folks usually feed their stock Timothy. Easy to establish, easy to handle for hay. Well known as prime horse hay crop. Keeps the draft animals from floundering. It's a tall grass, 40", low protein, high fiber. You need to feed them COB for grain. That's corn, oats and barley mixed. Your 'levator will know the ratio."

They had all winter to try and locate timothy seed. When they found it, they found it ran about \$1.50 a pound and you seeded about 6 pounds per acre. Recommendations were to apply 50 pounds of anhydrous per acre before you planted the crop, but anhydrous was getting impossible to come by. Manure would have to make do. Time allowed and they spread manure before they plowed the fields they intended to use for timothy.

I'll bet you noticed that they bought 12 Clydesdale mares and only one stallion. Women do all of the hard work and that goes for horses, too. It would be a while before the diesel became so scarce they had to resort to farming with horses; it gave 'em plenty of time to shop around for horse drawn implements. The farm wagons were the easy part, swap out the tongues. Balloon tires on the wagons would make it easier on the horses and as far as that went, they could use horses to pull the wagons and save diesel fuel and use the tractors only for the heavy work. The farrier most folks used at the Kearny County Saddle Club was familiar with shoeing draft animals and they solved one problem early on. I know we have a farrier in the audience, do you do draft horses?

In bygone days, farmer's generally had large families. Farming was labor intensive and raising a bunch of kids was the easiest way to recruit labor. If a farmer had the bad luck to father a large family of girls, they were like sons to him, and it isn't any wonder there were women like Calamity Jane Canary, e.g., tough. They would milk the cows and drive a team with the best of them. People forget how it used to be and lately, they haven't made many western movies, except about queer cowboys. The ones they made before, didn't really tell how it was with the farmer's wife.

John Deere 3 bottom plow, P&O 3 bottom plow; John Deere gang plow; P&O gang plow; gang plow; P&O sulky plow; walking plows; 8 ft. disc; John Deere 18 ft. disc; John Deere model R manure spreader completely rebuilt for horses; McCormick No. 7 mower; John Deere 4 row planter set up for horses; John Deere steel wheel gear; other steel wheel gears; hitch wagon (blue & white); hitch wagon box, needs to be restored, the wheels have been rebuilt; John Deere triple box wagon on rubber tired gear, sold by Pooley Lumber. Co., Greene (Iowa).

For information on old John Deere implements, write to Deere and Company, attn: Archives, John Deere Road, Moline, IL 61265-8098. Tell them everything you know about your implement and they will help you track down information and manuals. If you already know your model number, you can call 800-522-7448 to order a manual with a credit card.

Finding instruction and parts manuals for other old farm equipment is difficult, but not impossible. Sources include Lloyd Wenger, 831A Hilltop Road, Meyerstown, Pennsylvania 17067, phone 717-866-7147 (evenings) and Walter Miller, 6710 Brooklawn, Syracuse NY 13211, 315-432-8282. Walter has a large assortment of stationary engine, tractor, and farm implement literature, repair manuals, and parts books from 1900 to the present. Send him a stamped, self-addressed envelope with a specific request and he'll send a free list.

The Oliver and Hart-Parr Company archives now reside in the Floyd County Museum at Charles City, Iowa, phone 641-228-1099. The archives include photos, business records, advertising literature, and other documents from the years that Hart-Parr and Oliver machines were built in Charles City. The museum may have what you need. The following farm equipment collector's clubs and brand specific magazines may come in handy for finding information about a particular farm implement. A letter to one of these organizations or a notice in their newsletter may turn up a source for parts or manuals.

Advertising, literature, etc. – Farm Machinery Advertising Collectors, David Schnakenberg, 10108 Tamarack Drive Vienna, VA 22182, 703-938-8606

Allis-Chalmers – Old Allis News, Nan Jones, 10925 Love Road, Bellevue, MI 49021, 616-763-9770

Case – J.I. Case Collectors' Association., Inc., 400 Carriage Drive, Plain City, OH 43064

David Bradley – The David Bradley Newsletter, Terry E. Strasser, Route 1 Box 280, Hedgesville, WV 25427

International Harvester Company (McCormick-Deering) – IH Collectors, Allen Dummler, 648. Northwest Highway Suite 250, Park Ridge, IL 60068, 847-823-8612

International Harvester Company – Red Power Magazine PO Box 245, Ida Grove, IA 51445, 712-364-2131.

John Deere – Green Magazine, 2652 Davey Road, Bee, NE 68314-9132, 402-643-6269

Massey-Harris – Wild Harvest, Keith Oltrogge, Box 529 1010 S Powell Denver, IA 50622, 319-984-5491

Minneapolis-Moline – The Prairie Gold Rush, Paul Lowry, 11760 West 800 South, Francesville, IN 47946

Oliver/Hart Parr – Hart Parr/Oliver Collectors Association, PO Box 685, Charles City, IA 50616

Seats – Cast Iron Seat Collectors Bud Porter, 604 Washington Street, Woodstock, IL 60098-2251, 815-338-4781

A classified ad in Rural Heritage magazine might turn up the manual you're looking for. Finally, visit just about any of the antique equipment shows held each summer in every part of the Country. Among the flea market vendors is usually at least one literature stand. These folks have box after box of old manuals, often organized by manufacturer. Just in case the Chinese attack and you have to go back to horse farming.

◦

Author's note: Most of us have seen a walking plow, but they also made a riding plow, if you can find one. The first bit was from an estate sale in Waverly, Iowa. Your author was raised in Greene and Charles City. My grandfather farmed with a pair of Belgian horses. He sold them off in '48 after he had a heart attack and had to move to town. We moved to his place north of Greene and my brother and I were given rides on those Belgians, once. That was a long time ago, but they were beautiful animals. Grandpa was considered to be rich, with 2 draft horses. He had 3 sons and one daughter that lived. All are gone now. Most of my generation is in their 60s so it's going to be up to our kids to carry on for the family.

◦

If Disney made a movie about Belgian horse shows, the folks you'd root for would be Marty and Susan Trapp, Carroll County, (played by, say, Sam Shepherd and Jessica Lange).

The Trapps, classic underdogs, are at the Indiana State Fair this week with their seven enormous draft horses to compete in the various cart-pulling competitions. The six-horse hitch competition, the main event, is Saturday night in the Pepsi Coliseum.

The Trapps have been showing their horses since the early 1990s. "They're really improving," said Aaron Freitag. Freitag (maybe Kevin Bacon?) is a professional driver of Belgian horse carts. He is in town to drive for the team owned by the Canadian millionaire Bruce Brillinger (Claude Akins?). Brillinger, who opened a transmission shop in 1963, today oversees 90 Mister Transmission franchisees throughout Canada.

His Belgian operation is formidable, with its four full-time employees and four part-timers, all wearing shirts of bright orange that say "Mister Transmission."

The Trapps have neither uniforms nor employees. They do all the work themselves, with the help of a neighbor girl, Emily Fritz, 13, (Mary-Kate Olsen, perhaps?) who loves horses. They don't hire a driver. "If I'm going to do the work," said Marty, "I'm going to drive." Susan drives in the ladies division and Emily in the juniors.

Marty is a good driver, but Freitag is a great driver. Marty might be a better driver if he spent more time driving, but he has a job. He repairs semitrailer trucks. Susan works in a factory.

Top Belgian horses sell for around \$30,000. The Trapps spent about that for all seven of their horses. Naturally, they are not perfect. Den has an attitude and is hard to hold. Abe is pigeon-toed. (Trapp shoes Abe in such a way as to make the flaw less obvious.)

The show wagons the horses pull cost \$25,000. The Trapps bought theirs used for \$12,500 – paid for in trade, through semi repair.

The Trapps travel to about a dozen shows a year. They sleep in their truck and bring their food from home, even their coffee.

Belgians, like the other draft horses, the Percherons and the Clydesdales, are essentially obsolete. They once had jobs. They were workhorses. Now, except among Amish farmers, they're purely ornamental.

The prize money is small – \$1,650 for first place in the six-horse hitch at the fair, which is a big show. Unless you breed and sell Belgians to rich people, something the Trapps don't do, there's no way to make money.

"It's really just a hobby," Marty said.

Susan said the horses are fascinatingly different: "Den here is a horse horse. He's not that interested in people. But Victor – he has a very gentle soul. I wish I could turn him into a person, and we'd just go sit and talk."

The Trapps will be competing against 12 other teams of geldings. "We'll probably be somewhere around 10th," Marty said.

"Well," Susan said, "if they're having a bad day, and we're having a good day . . ."  
Remember, *Hoosiers* was based on a true story. (A report from the 2005 Indiana State Fair.)

## An Unlikely Outcome – Chapter 12

"Two horse or four horse hitch?"

"I believe we'd better make tongues in both lengths, Paul. Then we can swap them out, depending on the load on the wagons. The old man said those horses were already partly trained, but I believe we need to hitch them up and train ourselves how to handle teams." I replied.

"This should be fun," Mike laughed. "But I like the idea of using horses to pull the wagons and saving diesel fuel for the hard work."

"Speaking of which, I believe they use horses to harvest timber. What say we cut down a few trees or harvest some deadfalls?"

"I suppose you want to use the horses?"

"I have a log skid and we can use a 4 horse hitch."

"Fine, but I'm using my chainsaw," Mike winked.

It made sense to lay in a supply of wood, just in case we couldn't get stoker coal for the following winter. Winter came early and it was as hard of a winter as I could remember, maybe Carl Sagan was right. Mike had a chainsaw but neither Paul nor I did. We got two more in Garden City. We figured that Ray could handle the horses and skid the logs back to the nearest farm. From there, we could cut them up and split the wood and then haul it with our pickups. Might be a 6 cord winter, but since coal had 12 times the energy of wood, we probably had enough coal for the winter of 2009-2010.

None of what was happening was quite the way I expected it to be. Of course, we hadn't been to any of the big cities that took a hit from the Chinese. Neither had we seen any folks from FEMA, but then, we didn't need them. The Sheriff's roadblocks came down after the first really hard snow because very few people were traveling on the roads. The County couldn't really spare much fuel to plow the roads either. The only roads they plowed were US 400 and Kansas 25 south.

The 4 of us puttered away harvesting deadfall timber anywhere we could find a downed tree. The only tree in Kansas that made it to the National Registry of Big Trees was an Eastern Redbud (*Cercis canadensis* var. *canadensis*) in Topeka. Landmark trees played an important role in the settling of Kansas, guiding pioneers to their destinations. Such historic trees as the Custer Elm, the Post Office Oak and the Osage County Cottonwood were guideposts on the Kansas plains. Ninety-six percent of Kansas's 2.2 million acres of forestland are privately owned. The health, productivity, management, and sustainability of this valuable resource are the responsibility of the private landowners of Kansas. There are 747 million acres of forestland in the United States.

How much timber could 4 men harvest, given a whole winter to accomplish the task? More than we would need, so we stopped at 10 cords for each of the 4 families. Paul and Mike made Don and Sandy wear their BOBs to school and they shared a locker that Don paid for. That Presidential order to kill all the poultry meant that getting a turkey for Thanksgiving of 2009 was an expensive proposition so naturally, we got one 22 pound bird and all got together for Thanksgiving at Paul and Marilyn's. That's when we found out that Susan was pregnant. Don and Sandy were almost to that hand holding stage, but there sure wasn't any rush, an education is very important, even in a post-end of civilization scenario.

You see, of all the things you can acquire over a lifetime, the one thing they can't take away from you is your education. You may think you'll never use something like algebra, but trust me you will. You will also use geometry and trigonometry and chemistry and physics, even if you don't realize it. History is important because how can you know where you are going if you don't know where you came from? Civics class teaches you about politics (and what Patty Morgan keeps in her purse, Midol). How can a person criticize the government if you don't know how it is supposed to work, in theory? You might get confused and think the United States of America is a Democracy instead of a Constitutional Republic. Lots of people do, you know. Going to school is also valuable in that you meet all kinds of people and learn socialization, e.g., getting along with other people.

One might have expected that in the aftermath of such a terrible tragedy as a nuclear war, things would change and the Kansas Legislature would change the law and allow concealed carry permits and adopt legislation to eliminate the prohibition against NFR weapons, but it hadn't happened, yet.

There are a many states friendly to firearms owners, but those liberals always want to ask, "Why do YOU need THAT?" How about, "I don't NEED it, I just WANT it!" Sarah Brady can kiss my rump. So can the state of Kansas. Only Hawaii, the home of that stalwart Patriot Daniel Inouye, is a No straight across the board. Oh, that's right; the good Senator is a Democrat. I was surprised at the number of states that are a straight Yes across the board. What good is a silencer that may not be used on a gun? You will notice that if any of the characters in *An Unlikely Outcome* have any NFR firearms, I didn't compromise any LEOs by mentioning them. The rule is, if you kiss – don't tell. Only Hamilton County is between Kearny County and Colorado. Why is it fair for someone in Holly, CO to be able to own everything, we can't?

*Assault weapons* are prohibited in Connecticut, New Jersey and New York. Some local jurisdictions in Ohio also ban *assault weapons*. Hawaii prohibits *assault pistols*. California bans *assault weapons*, *.50BMG caliber firearms*, *.50 caliber ammunition* and *unsafe handguns*. California, in short, lists approved handguns and unapproved long arms. Illinois: Chicago, Evanston, Oak Park, Morton Grove, Winnetka, Wilmette, and Highland Park prohibit handguns; some cities prohibit other kinds of firearms. Maryland prohibits *assault pistols*; the sale or manufacture of any handgun manufactured after Jan. 1, 1985 that does not appear on the Handgun Roster; and the sale of any handgun manufac-

tured after January 1, 2003 that is not equipped with an *integrated mechanical safety device*.

Massachusetts: It is unlawful to sell, transfer or possess *any assault weapon or large capacity feeding device* [more than 10 rounds] that was not legally possessed on September 13, 1994 and the sale of handguns not on the Firearms Roster. The City of Boston has a separate *assault weapons* law. The District of Columbia prohibits new acquisition of handguns and any semi-automatic firearm capable of using a detachable ammunition magazine of more than 12 rounds capacity and any handgun not registered after February 5, 1977. Virginia prohibits *Street Sweeper* shotguns. (With respect to some of these laws and ordinances, individuals may retain prohibited firearms owned previously, with certain restrictions.) The sunset of the federal assault weapons ban does not affect the validity of state and local *assault weapons* bans.

So much for the 2nd Amendment...

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After Hurricane Katrina, many New Orleans residents legally armed themselves to protect their lives and property from civil disorder. With no way to call for help, and police unable to respond, honest citizens were able to defend themselves and their neighbors against looters, arsonists and other criminals.

However, just when these people needed guns the most, New Orleans's Police Superintendent ordered the confiscation of firearms, allegedly under a state emergency powers law. *No one will be able to be armed, he said. Guns will be taken. Only law enforcement will be allowed to have guns.* (Fortunately, an NRA lawsuit brought an end to the seizures – along with a far-fetched denial that confiscation had ever been ordered.)

Of course, no one condones the mindless violence of those who would loot a helpless city, or shoot at rescue workers. But one reason for the citizens to retain a legal right to arms is precisely because the government has no legal duty to protect them.

Legislative bodies can, and should, act to protect the self-defense rights of citizens at the times when those rights are most important.

Unfortunately, 33 states have *emergency powers* laws that give the government permission to suspend or limit gun sales, and to prohibit or restrict citizens from transporting or carrying firearms. In some states, authorities are authorized to seize guns outright from citizens who've committed no crime – and who would then be defenseless against disorder.

The movement to change these laws is gaining speed. Just two months after Hurricane Katrina, the Louisiana legislature – with only one dissenting vote – adopted a resolution declaring *the policy of the state of Louisiana to protect and uphold the citizens' right to keep and bear arms in their residences, businesses, and means of transport, and on*

*their persons*, condemning the seizure of firearms from New Orleans citizens, and announcing it planned to amend Louisiana's emergency powers law *to rectify the denial of these rights*.

In the past, America has balanced emergency needs with respect for constitutional rights. Months before Pearl Harbor, the US Congress passed the Property Requisition Act of 1941, which allowed the President, as a last resort, to seize needed war materials *upon the payment of fair and just compensation*. The Congress, concerned about the prospect of gun confiscation, included language to prohibit registration or seizure of privately owned firearms. America and its allies went on to win the greatest armed conflict in history. Today, Congress and the state legislatures should follow that lead.

*Law is order, and good law is good order*" Aristotle said. Without doubt, Florida's recently enacted *Castle Doctrine* law is good law, casting a common-sense light onto the debate over the right of self-defense. It reverses the pendulum that for too long has swung in the direction of protecting the rights of criminals over the rights of their victims. Despite predictable howling from the anti-gun media elite that Florida was taking an unprecedented and dangerous action, in truth it joined 24 other states that reject *duty-to-retreat* laws.

Passed overwhelmingly in the state legislature – unanimously in the Senate and 94-20 in the House – the new law removes the *duty to retreat* when citizens are outside of their homes and where they have legal right to be. It says that if a criminal breaks into your home or occupied vehicle or a place where you are camping overnight, for example, you may presume that he is there to do bodily harm and use any force, including deadly force, to protect yourself from a violent attack. Floridians who defend themselves from criminal attack are shielded by the new law from criminal prosecution and from civil suits brought by their attackers.

In testifying for the bill, Marion P. Hammer, executive director of Unified Sportsmen of Florida, said: "No one knows what is in the twisted mind of a violent criminal. You can't expect a victim to wait before taking action to protect herself and say: *Excuse me, Mr. Criminal, did you drag me into this alley to rape and kill me or do you just want to beat me up and steal my purse?*"

Florida's *Castle Doctrine* law does the following:

One: It establishes, in law, the presumption that a criminal who forcibly enters or intrudes into your home or occupied vehicle is there to cause death or great bodily harm, so the occupant may use force, including deadly force, against that person.

Two: It removes the *duty to retreat* if you are attacked in any place you have a right to be. You no longer have to turn your back on a criminal and try to run when attacked. Instead, you may stand your ground and fight back, meeting force with force, including deadly force, if you reasonably believe it is necessary to prevent death or great bodily harm to yourself or others.

Three: It provides that persons using force authorized by law shall not be prosecuted for using such force. It also prohibits criminals and their families from suing victims for injuring or killing the criminals who have attacked them. In short, it gives rights back to law-abiding people and forces judges and prosecutors to focus on protecting victims.

US Rep. Cliff Stearns' (R-Fla.) national Right-to-Carry (RTC) reciprocity bill, H.R. 4547, would allow any person with a valid concealed firearm carrying permit or license, issued by a state, to carry a concealed firearm in any other state, as follows: In states that issue concealed firearm permits, a state's laws governing where concealed firearms may be carried would apply within its own borders. In states that do not issue carry permits, a federal "bright-line" standard would permit carrying in places other than police stations; courthouses; public polling places; meetings of state, county, or municipal governing bodies; schools; passenger areas of airports; and certain other locations. H.R. 4547 would also apply to DC, Puerto Rico and US territories. The bill would not create a federal licensing system; it would require the states to recognize each other's carry permits, just as they recognize drivers' licenses and carry permits held by armored car guards. Rep. Stearns has introduced such legislation since 1995.

Today, 46 states have laws permitting concealed carry, in some circumstances. Thirty-eight states, accounting for two-thirds of the US population, have RTC laws. Thirty-four have *shall issue* permit laws (including Alaska, which also allows carrying without a permit), three have fairly administered "discretionary issue" permit laws, and Vermont allows carrying without a permit. (Eight states have restrictive discretionary issue laws.) Most RTC states have adopted their laws during the last decade.

Citizens with carry permits are more law-abiding than the general public. Only 0.02% of more than a half million permits issued by Florida have been revoked because of firearm crimes by permit holders. Similarly low percentages of permits have been revoked in Texas, Virginia, and other RTC states that keep such statistics. RTC is widely supported by law enforcement officials and groups.

States with RTC laws have lower violent crime rates. On average, 21% lower total violent crime, 28% lower murder, 43% lower robbery, and 13% lower aggravated assault, compared to the rest of the Country. Nine of the 10 states with the lowest violent crime rates are RTC states. (Data: FBI.)

Crime declines in states with RTC laws. Since adopting RTC in 1987, Florida's total violent crime and murder rates have dropped 31% and 52%, respectively. Texas' violent crime and murder rates have dropped 19% and 33%, respectively, since its 1996 RTC law. (Data: FBI.)

The right of self-defense is fundamental, and has been recognized in law for centuries. The Declaration of Independence asserts that "life" is among the unalienable rights of all people. The Second Amendment guarantees the right of the people to keep and bear arms for "security."

The laws of all states and constitutions of most states recognize the right to use force in self-defense. The Supreme Court has stated that a person *may repel force by force* in self-defense, and is *entitled to stand his ground and meet any attack made upon him with a deadly weapon, in such a way and with such force* as needed to prevent *great bodily injury or death*. (Beard v. U.S., 1895)

Congress affirmed the right to guns for *protective purposes* in the Gun Control Act (1968) and Firearm Owners' Protection Act (1986). In 1982, the Senate Judiciary Committee Subcommittee on the Constitution described the right to arms as *a right of the individual citizen to privately possess and carry in a peaceful manner firearms and similar arms*.

We're right in the middle of hunting seasons in most parts of the Country. Millions of hunters are in the fields and woods with pump-action and semi-automatic rifles and shotguns. The guns' names – Ruger and Remington, Browning and Beretta, Mossberg and Marlin, Winchester and Weatherby, to name a few – are familiar to us all.

However, if anti-gun activists and politicians have their way, all of those guns would be banned as *assault weapons* next year, along with the rifles that dominate High Power rifle competitions and home-defense shotguns.

Legislation proposing to ban those guns was introduced in 11 states during 2003-2004 and will be introduced in even more states in 2005. Some bills are being drafted from a template devised by the Legal Community Against Violence, a cadre of anti-gun California lawyers, while others track with bills introduced in Congress this year.

As a hunting partner of mine dryly commented not long ago, "it's not about only 'scary-looking' guns anymore." Of course, it never was about only a narrowly defined group of semi-automatics that look like fully automatic military rifles, or about rifle and pistol magazines that hold more than 10 rounds. The truth is gun prohibitionists in this Country have a zero tolerance for gun ownership. For many years they've looked longingly overseas, admiring the bans imposed in foreign countries.

American sportsmen too often take for granted the hunting and sporting guns that many nations have prohibited their people from owning. Anti-gun groups within our borders are always waiting for a ripe opportunity to push for the same kinds of prohibitions here. So, when Germany prohibited pump-actions a few years ago, the founder of the so-called Million Mom March demanded that Congress do the same, along with subjecting America's gun owners to psychological exams.

The anti-gunners' true goal becomes painfully clear when the list of guns they call *assault weapons* grows longer as each bill is introduced. First, it was military-looking semi-automatics. Then they added all semi-automatic shotguns and detachable-magazine semi-automatic rifles. Now they are including pump-action shotguns, and, in some cases, 28-ga. and larger shotguns regardless of action type.

We even see a Michigan bill that would permit the state police to conduct annual home inspections to determine if registered *assault weapons* are stored in the manner they deem to be proper. Following the British "mandatory storage" example, who's to say their requirements won't be ratcheted up to force gun owners to buy expensive safes to store inexpensive firearms?

As they crusade to strangle your right to keep and bear arms, the anti-gunners are determined not to let the truth get in their way, knowing they can count on their media-elite friends to conceal their deception. If facts alone drove the debate, two separate federal government studies released this year would have put an end to the *assault weapon issue* at the federal level and led to a repeal of bans in place in seven states and the District of Columbia.

The first, conducted for the National Institute of Justice, concluded that the Clinton ban had no bearing on violent crime, because the guns that it banned were used in only about 2 percent of violent crime and are functionally no different than many other guns. The second, produced by the Congressional Research Service, showed why the Brady Campaign's claim that the ban reduced crime is a fraud and how the Violence Policy Center (VPC) flat-out lied about how often the banned guns were used against police officers.

In the weeks before the Clinton ban expired, 90 or more newspapers editorialized in favor of the ban trumpeting Brady/VPC lies. A tough fight was made tougher for us by all the misinformation circulated at the time, largely because of the bias or carelessness of many in the media.

We have not seen the end of these distortions. It remains important for every NRA member to stay involved in the fight, calling or sending letters to elected representatives and news organizations, letting them know where you stand and what the facts are. Facts worth remembering include: In the United States, violent crime – three-quarters of which is not gun-related – has declined every year for 12 straight years, 35 percent overall, and is at a 27-year low. Murder rates are the lowest they have been since the mid-1960s. At the same time, the number of privately owned firearms – including *assault weapons* – rises by 5 million a year. There are more Right-to-Carry states (38) than ever. Many states have passed laws eliminating local gun-control ordinances, and many states' waiting periods and purchase permit requirements have been eliminated in favor of the National Instant Check.

This is no time for state legislatures to reverse course and adopt failed gun control schemes in the name of fighting crime. Banning guns because some criminals use them is futile. Even worse, gun bans tell us that our rights and liberties depend not on our own behavior but on the conduct of outlaws. Gun bans tell honest citizens that they have only such rights and liberties as criminals – or terrorists – will allow.

That's the darn NRA, what a bunch of pro-gun nuts. Crackpot's to the core. The 2nd

Amendment's all about militias, not about the right to keep and bear arms. Anyone without a brain knows that! Some people got all in a dither because someone used a handgun to attempt to assassinate a President. Hey, guys, it wasn't the first time someone used a handgun wrongly and it won't be the last. Blame the gun for the owner's behavior. Blame the manufacturer because they have deeper pockets. I don't get it, but I'm just a farmer boy. It's the fault of the gun, not the criminal; don't you know that by now? There are cheaper suppressors than the Surefire suppressors, too, but those Surefire suppressors sure last a long time, 30,000-rounds or so 'they' claim. Ought to for what they cost; made in California, where they are illegal to own, LOL.

Lynette 'Squeaky' Fromme used a M1911 to attempt to assassinate Ford. They forgot to outlaw those, thank God. Of course Gerald Ford died, eventually, pneumonia. Had it more than once, he did.

## An Unlikely Outcome – Chapter 13

Left out a link to the original version of 'Ghost Riders in the Sky', listen to it here. Search for Vaughn Monroe Society dot org. You'll need Real Player. Also has both versions of 'Let it Snow'.

I ought to apologize to getting away from the story, but those gun nuts do that to me every darn time. Where was I? Oh yeah, I was mentioning Patty Morgan's purse or was I talking about civics class; same thing as far as I'm concerned. I really liked her, but she was 6' tall and I was about 5'5, made a difference when you were in high school. Darn nice, she was. Got married and moved to Nashua, or the other way around. I remember where I was, you see, of all the things you can acquire over a lifetime, the one thing they can't take away from you is your education.

There is only really one way to learn about horses and that is to own them and use them, for riding or pulling something. Skidding logs was as good a way as any other. Not only did we learn a bit about draft horses, we had some firewood stored up in case we couldn't get stoker coal. You don't know about stoker coal? You're going to have to wait while I rant.

o

DODGE CITY, Kansas (CNN) – This past Saturday morning I found myself in a five-car caravan cutting across the Kansas plains with about 30 religious protesters. In the back of a truck, there were signs that read *Thank God for IED's* and *Thank God for Dead Soldiers*.

I was with the Phelps family. They've launched a disturbing campaign to tarnish the funerals of fallen soldiers.

This is a painful drama playing out at dozens of military funerals across the Country. The group is led by Fred Phelps.

He and his family have picketed and heckled military families at more than 100 funerals since June. They say the soldiers are fighting for an army that represents a Country that accepts homosexuality.

I have spent a great deal of time in the last few weeks tracking the movements of Fred Phelps and his family. Saturday, I followed him and his family from their home in Topeka, Kansas, to a funeral in Dodge City, Kansas.

Fred Phelps is the pastor of Westboro Baptist Church in Topeka. The congregation is made up mostly of his family. Phelps has 13 children, 54 grandchildren and 7 great-grandchildren.

He describes himself as an *old-time* gospel preacher who says, *You can't preach the*

*Bible without preaching the hatred of God* [Funny, I thought it was God's love.] for themselves by showing up at high-profile events preaching their hate-filled brand of Christianity. They blame homosexuals for the destruction of America.

This past weekend's target was Army Sgt. Jessie Davila.

Davila was killed February 20 in Iraq by a suicide bomber. He served as a Marine after graduating from high school. He returned to civilian life, and had a daughter. But he was always a soldier at heart, so two years ago he joined the Army National Guard and was three months into an Iraqi deployment when he was killed.

This is also very much a story about another phenomenon the Phelps protest has created. That's the birth of a group called the *Patriot Guard Riders*. They're a volunteer group that came together after hearing that so many military families were being blindsided by the protesters.

More than 400 motorcycles thundered toward this showdown in Dodge City this weekend to make sure Sgt. Jessie Davila's funeral was not overshadowed by the Phelps protest. They converged from small towns all over southwest Kansas to support Sgt. Davila's family. One group leader says, *I knew we would have a crowd, but I didn't know it would be this big.*

The procession of rolling thunder escorted Davila's family from memorial services to the grave site on a quiet hill.

In the end, Sgt. Davila's family says they were only able to hear a little bit of the Phelps protest. Davila's mother, Linda Claus, says she's grateful for the Patriot Guard Riders. But she also wants other military families to be aware that this could happen to them.

"When people begin to know what they're (Fred Phelps' family) really doing – killing the American Dream – they won't be around very long, because nobody's going to let them. They'll drown them out. They'll be gone," Claus said.

Since CNN started airing reports on these funeral confrontations a few weeks ago, the Patriot Guard Riders say its membership has almost tripled. And more than a dozen states are now considering legislation that would restrict protesting at funerals.

The Phelps family vows to continue these protests. They might be outnumbered, but the way the Patriot Guard Riders see it, it only takes one of them to dishonor the memory of a fallen soldier.

Kansas is just like anywhere else, it has its share of buttheads.

o

Stoker coal is smaller than lump coal. A stoker is a hopper with an auger that slowly

feeds coal to your furnace. The great thing about a stoker is that you fill it far less often than you have to bank a fire the manual way. You have a couple of tasks, removing the ash and keep the stoker full of the crushed coal. In my experience, stoker coal seems to produce less ash, but I know nothing!

Stoker-fired systems account for the vast majority of coal-fired watertube boilers for industrial, commercial, and institutional applications. Most packaged stoker units designed for coal firing are small and can be divided into three groups: underfeed stokers, overfeed stokers, and spreader stokers.

Underfeed stokers are generally either the horizontal-feed, side-ash-discharge type or the gravity-feed, rear-ash-discharge type. An overfeed stoker uses a moving grate assembly in which coal is fed from a hopper onto a continuous grate which conveys the fuel into the furnace. In a spreader stoker, mechanical or pneumatic feeders distribute coal uniformly over the surface of a moving grate. The injection of the fuel into the furnace and onto the grate combines suspension burning with a thin, fast-burning fuel bed.

The amount of fuel burned in suspension depends primarily on fuel size and composition, and air flow velocity. Generally, fuels with finer size distributions, higher volatile matter contents, and lower moisture contents result in a greater percentage of combustion and corresponding heat release rates in suspension above the bed. Our coal furnace was a forced air furnace not a boiler, but other than that, the foregoing is accurate. There was a lot less to go wrong with a forced air furnace than a boiler with radiators. As a general rule, simpler is better. A person could detach the stoker in maybe 30 minutes and convert to burning wood.

◦

None of us gave much thought to Don and Sandy. Perhaps, Rachel had a word with her, but if she did, they kept it between themselves. I suppose that lots of people from big cities think that small rural schools are nothing more than breeding grounds and a girl is lucky to get through high school without ending up pregnant. It happens but not in this case. Maybe Paul also talked to Don. This is the Bible Belt and most farmers tend to be a bit conservative anyway. Sue and Ray set a good example and were out of high school a year before he got around to proposing. Kind of cute how he ended up doing it, but Sue had a bit of fun when he did.

When we asked if they wanted a boy or girl, their only concern was a healthy baby. I wouldn't want to be starting a family after all the things we'd been through, but life goes on. Ray would probably divide his time between helping Mike and Paul. I'd probably need pointers from Paul on raising beef and hogs and we have to set up some of our hens as brood hens and see how many chicks we could get for the coming year.

Most times farmers work their own land and only help their neighbors if they're asked. Unless something happens to the a neighbor vis-à-vis a farming accident in which case everyone shows up to lend a hand. Machinery is dangerous and it only takes one small

slip or a moment of forgetfulness to really get hurt. Many farmers wear short sleeved shirts because of it.

Someone gave me a hard time when I said I had my diesel pickup tuned up and told me there were no ignition parts on a diesel pickup. When internal sensors detect that the core of the engine block has reached a certain designated temperature, or when a certain amount of time elapses, the glowplug relay switches off the *wait-to-start* light. A pre-heating cycle usually lasts for 2 to 5 seconds. The operator then proceeds to turn the key to the *start* position, as in a gasoline engine. The glowplug relay switches off the glowplugs after the engine is running (or, in older cars, at the same time the *wait to start* light goes out). In some newer cars, glow plugs continue to operate for up to 180 seconds after engine start to keep the engine within emissions regulations, as combustion efficiency is greatly reduced when the engine is very cold.

A tune up consists of an oil change, getting the injectors cleaned and checking all of the belts, hoses and the battery. You call it what you want and I'll call it a tune up. Most aftermarket injector cleaners call themselves a *diesel tune up in a bottle*.

o

I'll bet that when I told Paul I had 1,000 gallons of propane, you were thinking that I had propane furnace. Nah, that's the kitchen stove and hot water heater. The ones in the shelter are electric. If we get a big enough harvest next year, we might need to use both stoves at once. That depends on if I can find more mason jars and more pressure canners. We have an old cold pack canner, that blue pot with the lid, but we haven't used it for that in a long while. June usually bought a couple of cases of mason jars every year to replace those with chipped edges and such but I did notice she had a pile of those in one corner of the basement. When I asked about the extra jars, I got the lecture on the things you can't have too many of. They think differently than we do, or hadn't you noticed? She must have had a case of those boxes of canning lids.

When it finally dawned on me that truck farming might use a lot of those jars, I got together with Mike and Paul and we went hunting, for jars, lids and rings. We checked everywhere and found a few leftover from last season, but probably not nearly enough. So, we put a notice up on several bulletin boards that Don and Sandy would have a table set up in town on Saturday and would buy used mason jars: pints, quarts and jelly jars. We offered 25¢ for the quarts, 15¢ for the pints and 10¢ for the jelly jars. It's a good thing we took Paul's big truck to town when we went in that evening to pick up the kids. Hallelujah.

"You're pretty smart for a dumb farmer."

"Why thank, you Paul, I was just thinking the same about you."

"How many you figure we got?"

"Don't know and you'd better slow down, the road is a bit icy. It might be nice if we got those jars home intact."

When we got home, we unloaded the jars into my machine shed because it had the most room. June had a nice fire going in the fireplace and was making cocoa. Man, it was cold outside, unseasonably cold. I told you earlier what the weather was usually like in our area, but man, it must have been 10° below zero. Fair wind, too, must have been blowing 20mph. I could have gone to the shelter and checked, but the fire looked too inviting.

"How many jars did you get?"

"Paul asked me the same thing, June, and I didn't really count them. A truckload, but they weren't all nicely packed in their regular boxes, so probably fewer than it looks like. Don said he was asked more than once what we wanted the jars for and he told them we were going to start truck farming. He also said a couple of ladies wanted to buy jars from them."

"I hope he didn't sell them any."

"He said that Sandy and he sorted the jars when they bought them and had the ones with rough edges set aside. They sold those off for a dime more than they were paying."

"Will those be any good for canning?"

"Might if they use plastic lids instead of rings and flat lids."

o

"What do you want for Christmas?"

"Uh, Peace."

"A piece of what?"

"Randy, I just want no more wars, no more fighting, and for things to get back to normal."

"We might not have any more wars, with two major powers getting into a nuclear exchange, but I wouldn't look for things to return to what used to pass for normal anytime soon. We bought draft horses because it doesn't look like there will be much fuel for some time to come. We don't really have a lot of fuel, just that 10,000-gallon diesel tank and the 1,000-gallon gasoline tank. The price is up to \$8 a gallon and he didn't know when he'd get any more fuel."

"Lord, what's this world coming to?"

"I'd have to say that we're already there. When we run out of propane for your stove, we'll have to move the electric stove up from the shelter. If we can't get stoker coal, we'll have to burn wood in the furnace. We should have electricity for several years, but only because Paul and I went to Denver and got those wind turbines. I'll probably try and save some propane for the generator and go to horse farming early rather than later. We can breed a pair of the mares in alternating years and use the other pair for farming."

"What about the saddle horses?"

"We don't need them for transportation yet, so we should breed them 2 or 3 years running and build up a small herd of horses. They're going to be worth quite a lot when there isn't any more fuel. Not to change the subject, but I should have cashed in one of those CDs a long time ago and bought some pre '65 silver coins and maybe even some gold coins."

"There's Daddy's coin collection up in the attic, I'd completely forgotten about it. He saved every denomination in those folders. When he'd get a folder filled up, he'd buy a new folder and start over. There is a whole box of coins, but I don't know how many. They were killed back in '79 so they must mostly be old coins."

o

I want to talk about an unusual subject, in-breeding and incest. Incest is defined as sexual relations between persons who are so closely related that their marriage is illegal or forbidden by custom. Inbreeding is defined as to breed by the continued mating of closely related individuals, especially to preserve desirable traits in a stock. Cousins marry cousins and that's about as far as the law allows. I do know that Iowa has a law and you have to be at least 4th cousins to marry or get a judge to sign off. There will be a quiz tomorrow and the subject might surface again.

In livestock, inbreeding is sometimes done intentionally. During the Civil War Morgan's were dependable cavalry mounts and artillery horses. Again, their easy-keeping qualities and ability to endure grueling conditions allowed them to outlast other types of horses. Several units of cavalry in the Union army and one (known) of the Confederate army were mounted on Morgan horses. United States General Philip Sheridan's famed charger Winchester (aka Rienzi), who was immortalized after the war, was a descendant of Black Hawk.

Due to a trend in which taller horses were becoming more desirable with great speed at short distances, the popularity of Morgan horses began a decline, which would not reverse itself for several years. Morgan mares continued to be widely used by horse breeders, but were bred to taller stallions of non-Morgan breeding. The purpose was to capture the enduring qualities of the Morgan but with increased size in the offspring. The result was a more marketable product for farmers selling to the city markets. As a

result of this practice the Morgan, as it had been known earlier in the 19th century, almost disappeared.

From this type of foundation other American horse breeds were developed. Harness racing had become an exceedingly popular sport for which the Standardbred was developed. Other major American breeds that contained the Morgan horse in their initial development include the American Saddle Horse, Tennessee Walking Horse, American Quarter Horse, and American Albino.

Continuing modernization and development of new technologies, however, were affecting the horse market nationwide. Electrification of trolleys and continuing expansion of trains reduced the demand for harness horses significantly. Larger farms and a corresponding increase in the size of agricultural machinery to do the work were creating a demand for larger, heavier draft horses.

The 1890's witnessed efforts on the part of many to locate and *regenerate* the Morgan horse. A business horse or roadster was desired with not only speed but with the classiness which would reflect upon one's social standing as well. Writers berated the disappearance of the *ancient* type Morgan and called for its regeneration, if it could be found. Pockets of these Morgan's had survived, particularly in northeastern Vermont, though much reduced in number.

Paul had American Quarter Horses, I had Morgan Horses and Mike had Tennessee Walking Horses. The latter are gaited while the Morgan is not. All of my Morgan's were mares and if I was going to keep the line, I had to find a Morgan stallion. Paul had 2 Quarter Horse stallions out of different sires and his mares were out of other sires so he was in good shape. Mike had one stallion and 3 mares.

o

Screw the interest penalty the bank charged, I had to cash in another CD and buy a Morgan stallion, maybe two. There was no getting out of going to the Kansas City area, a guy had stallions for sale at the Thunder Morgan Farm, in Franks, about 60 miles south of Kansas City. They weren't cheap, \$2,500 each for a couple of unproven 3 year olds and that was like buying a pig in a poke. Couldn't register the transfer either, no mail.

Dad had a \$50,000 cancer policy on each of them plus \$100,000 on Mom and \$250,000 on himself. It's none of your business, but I thought you'd like to know where the money came from. Speaking of which, that box of coins in the attic was all old coins. The newer coins were in a box by themselves and June's dad never got around to getting coin folders for them. The biggest surprise was those silver dollars; he must have had more than a hundred of them, 1921, 1922, etc.

The aesthetically pleasing *Peace* Silver Dollar is a beloved symbol of US coin history and has, for many years, been a very popular item with coin collectors. It is the last dol-

lar coin minted for general circulation with a silver content of 90%. Future silver dollars would be minted with a considerably lower silver content. Accordingly, many collectors treasure the Peace Dollar as the last *true* American silver dollar.

There weren't any gold coins in the box, mores the pity.

"Coffee on?"

"Hi Paul, help yourself."

"What are you doing?"

"June's father collected coins and we just brought the box down from the attic. Most of these coins are pre-65. There must be a dozen books of each denomination. There were over 100 old silver dollars but no gold coins."

"My father had just sold off a large herd of cattle back in '75 when they repealed the law. He bought gold at \$160. Then the price dropped to \$124 and he bought more. Five years later, it was over \$600 an ounce. He sold off the \$160 gold and kept the \$124 gold. You want gold, I've got gold, can't eat it though."

"How big was the herd of cattle?"

"100 head in '75, 155 head in '76."

"I didn't know that."

"You don't go around talking about having a box full of gold coins. A couple of years before he died, he came over and handed me the box of coins and told me he'd be damned if he pay estate tax on the gold. I locked it in my safe and never touched it. He sold me a half interest in the farm for \$1 and other valuable consideration."

"Really?"

"The man hated taxes, let me tell you. That's all I paid for half of the farm, \$1. Then when they died, the inheritance taxes didn't eat us up. He put most of his money in a farm checking account, joint tenants in common with rights of survivorship. All I had to pay taxes on was the house in town and half the farm."

"I thought I had a fair amount of money. Look at you, you must be a millionaire."

"Might be; if I could sell 640 acres for \$2,000 an acre. I'm not looking forward to farming that big of a spread with horses."

We only have 160, how big is Mike's farm?"

"I suppose we'd better plan on planting lots of grass, like Timothy."

"I'll have to combine some of it to get more seed. Can't grow all grass, we'll have to grow oats, corn and wheat, plus the large gardens. Don't have any idea where we're going to find enough help."

"There are a lot of people out of work in Lakin and Deerfield."

"How come June and you never adopted?"

"We talked about it, but just never tried. It's fairly difficult to get a baby to raise."

"A baby wouldn't do you much good now. If you'd adopted 13-14 years ago, you'd have a teenager to help out on the farm."

"Well, we didn't."

"The flu pandemic killed a lot of folks. I wonder how many orphans it left in its wake."

"Hadn't thought about that. Who do you suppose we'd have to see?"

"Your first step would be getting June to agree, partner."

o

In Kansas during February of 2006, a federal trial began regarding a state law prohibiting virtually all sexual activity by people younger than 16 years. The trial examined the question of whether this means that healthcare professionals must report such sexual activity to state authorities. Medscape was conducting a poll. The author told them he thought it was a crock because you can't legislate morality. Oh, you can try, remember prohibition? Does the name Capone sound familiar? Who is going to put a couple of 14 year olds in prison?

Did I tell you the state of Iowa is trying to make me pay Iowa taxes? I had to sic Mark on 'em. I've been a California resident since '82 when they sent me here and intangible income is taxable to your residence. He wrote back and said, *Of course that may be Iowa's strategy, in that they get to keep this ill-gotten tax and other states subsidize it with credits. Wasn't that your strategy when you were one of them?*

o

"I never really thought about it after we talked about it, Randy. We could board a couple of kids that lost their parents to the flu, I suppose. Did you check it out?"

"They don't have any money in the till for paying for foster care anymore. So if we took one or more kids, it would have to be teenagers who could help us with the work around

here. Paul mentioned it and was definitely talking about older kids. He said if we were going to adopt a baby, it should have been 13 or 14 years ago."

"Sorry, we don't have any babies available for adoption. We don't pay for foster care since the war."

"We were thinking about perhaps a couple of kids maybe age 12 to 14."

"Got a pair of twins we've had trouble placing, boy and a girl, aged 13 that absolutely refuse to be split up."

"We've never done this before, what's involved?"

"You have to feed and clothe them and get them to school. The letter from Doc Williams is enough for a temporary placement until we can check you out."

"How are you going to do that? It seems to me that about all you can do is check with the Sheriff and maybe our pastor."

"And what will we find?"

"No records, that's for sure. We sometimes miss church. You can come to the house and check it out; it's an old 2-story farmhouse with an attic and basement. We have plenty of bedrooms."

"I'll introduce you to Jim and Mary. While you get to know them a bit, I do a little checking."

"Jim, Mary, this is Mr. and Mrs. Webster. They're looking for a couple of teenagers to live with them on their farm."

"We're really sorry for your loss, did you lose both of your parents?"

"Dad was killed in Iraq. Mom died from that bird flu."

"How did you manage to get through the war?"

"We were in the county shelter and hung out in the basement for a while."

"I see that Jim has a voice, what about you Mary?"

"I can talk. I don't have anything to say."

"Have you ever been on a farm?"

## An Unlikely Outcome – Chapter 14

"This is Kansas, not New York City, who hasn't been on a farm?"

"Did you visit a farm or actually live on one?"

"We picked wild asparagus from ditches and Morel mushrooms from the woods."

"But you never stayed on a farm?"

"No."

"Would you like to give it a try, Mary?"

"I'm not going anywhere without my brother."

My turn, "Jim can I assume that you have the same experience with farms as Mary?"

"You can assume whatever you want."

This wasn't going well, I could see. Those two kids got a double whammy, losing their dad in a war that became almost unpopular as Vietnam and then their mom to a fatal flu for which there was a treatment.

"It was nice to meet you kids, we hope you'll come to live with us," June announced, ending our brief conversation.

We left and June cornered me immediately, "What do you think Randy?"

"It's entirely up to you, hon. I'm game if you are, but those kids have a mouth."

"You'd have a nasty mouth on you if you'd been through what they've been through."

After being married to a person for 22 years, a statement like that doesn't need translation, June had her mind made up; Jim and Mary were coming home with us. At the time, I had no idea who Father Flanagan was. Spencer Tracy won an Oscar for portraying Flanagan in a 1938 movie (*Boy's Town*), but it was before my time. It was started in Omaha and moved to a farm.

"What did you think of the children?"

"They can come home with us if you'll allow and they'll agree."

"We'll allow, I go see what they think," she said.

"I guess we're not wanted by the law," I chuckled.

◦

Jim and Mary's possessions were, well... meager, one small suitcase each. First stop was to get them appropriate attire for living on a farm a ways north of town. We had horses and I favored cowboy boots because of the heel, kept your foot from sliding through the stirrup. Boots, jeans, shirts and blouses, and what the hell, even a hat. We ended up with miniature versions of Roy Rogers and Dale Evans.

"Cute, where's my horse?" Jim mouthed off.

"At home in the barn, do you ride Jim?"

"I had a bike."

"What did you feed it, oats or hay?"

"Huh?"

"A horse is a living, breathing animal that needs care and attention. We have 2 breeds of horses, Morgan's for riding and Clydesdales for working in the future. We've also started to raise cattle and hogs and have a flock of chickens. All of those animals need care so you can help me and your sister can help June."

"Lincoln freed the slaves."

"Lincoln did issue the Emancipation Proclamation at the beginning of 1863, which on paper freed slaves in the states of the Confederacy that had seceded from the United States. Lincoln's Proclamation, as its critics have noted, freed not a single slave. It applied only to slaves in Confederate-held territories. It did not free any slaves in territories liberated by Union armies or in the four slave states – Delaware, Kentucky, Maryland, and Missouri – fighting on the Union side."

"I thought you were a farmer, not a history teacher."

"I'm a farmer and a part time Emergency Medical Technician. So is June. Look kids, it's simple, room and board, new clothes and you'll be going to school in Lakin. You're not getting a free ride, however. You will be given chores to perform and help on the farm. I'm sorry that life hasn't been good to you, but June and I will do what we can to change that. End of lecture, we're here."

◦

Thank God Paul and Don were there when we got back. Don took Jim under his wing

and they disappeared. Mary was a bit shy and withdrawn, so June showed her room, got her linen and told her to make up her bed and put her things away. Paul was consoling, pointing out that these twins had been through a licking and like the Timex watch, kept ticking. He suggested that I just let Don work the rough edges from Jim and maybe, with Mike and Rachel's permission, Sandy could do the same with Mary.

It was hard to imagine what the kids had been through, but whatever it had been like, it wasn't good. Worrying every day would Daddy get home ok from Iraq and then getting a body in a closed coffin, IED attack we later learned. As a single parent in an economy of sharply rising prices, their mother had to take a job earning little more than minimum wage to supplement the military death benefits. The kids got their flu shots through the school, but apparently she didn't have or take time to go to the clinic and get her free immunization. She caught the flu from a customer and was well past the 48-hour deadline for Tamiflu before she was sick enough to do something. That was just plain dumb, but she paid dearly for her mistake.

◦

W.C. Fields starred in, *Never give a sucker an even break*. P.T. Barnum never said, *There's a sucker born every minute*. Those words were uttered by David Hannum, a banker who led a syndicate that owned two-thirds interest in the Cardiff Giant.

◦

"Mary, we gather these eggs over here and leave the eggs that those hens are sitting on alone. We're trying to increase the size of our flock."

"It stinks in here."

"Wait until you get to the pig pen. I'll gather the eggs during the week and you can do it on the weekends. What grade are you and your brother in?"

"8th."

"Have you ever ridden a horse before?"

"No."

"After our mare's foal, we'll see that you get a chance to learn."

"Do you grow everything you need on the farm?"

"No, not exactly. The climate isn't right to raise some of the things we need, but you'll find that we grow most of the things we use and in the future will be growing more."

"Oh?"

"Next summer we'll be starting to use those big horses to do some of the work and we're going to start truck farming and raising food for the people in Lakin and Deerfield. I don't know, but I'd imagine that several other farmers' will be doing the same."

"So are you and Randy Paramedics?"

"About one notch down, we didn't get that training."

"Why did the Chinese bomb us?"

"I can't answer that. The men seem to think because the United States was in trouble over the flu pandemic and terrorists had introduced the pneumonic plague. Perhaps they saw us as weak. Do you know about Taiwan? The United States and Japan made a treaty with Taiwan to defend them if the mainland Chinese attacked. However, when it happened, the new President refused to honor the treaty. Maybe that gave them the idea that we wouldn't interfere in their dispute with Vietnam over the oil. However, the President was forced to act and out of it came the war."

"But, what do you think?"

"I was in the Army too, Mary, so my thinking is pretty much in line with what the men think."

"Your home is scary."

"Why?"

"You have guns all over the place and even wear one whenever you go outside."

"Are you afraid of guns?"

"Well..."

"A gun locked in a cabinet or in a holster never hurt anyone. People make guns work; a gun doesn't pull its own trigger. It may be a slight overreaction, but the Country has seen a lot of trouble and more than ever, there are people out there, somewhere, who might choose to take what we have instead of working to get what they need. You may feel different after you learn to shoot and have your own guns."

"I don't ever want to carry a gun."

"Sandy does. Do you remember that fanny pack she wears everywhere she goes? It's called a BOB, for Bug out Bag, and it contains a pistol. That's why Don and she have to check them at the store and put them in a locker. They can't take a gun onto the school grounds."

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Let's say that you have two things, a firearm and a bicycle. Given a choice, most often the boy will choose the gun and the girl the bike. During the early months of 2010, the weather in southern Kansas was much more like northern Minnesota. So much so that bus service was discontinued and with Kearny County not plowing the roads, travel became nearly impossible. June and I decided that we'd start the kids out with those 9422s we had once the weather permitted. We'd then introduce them to the Winchester .45 Colt rifles and finally the .45 Colt revolvers. They were perhaps too young to have a firearm in their BOBs and we omitted them for now. We didn't really have any appropriate firearms to go in a BOB anyway. But, I'm getting ahead of myself.

"Paul what do you and Mike have in Don and Sandy's BOBs in the way of firearms?"

"We set them up with Browning Hi-Powers with 3 13-round magazines, one in and 2 spares."

"We set Jim and Mary's BOBs up without firearms for now. June and I were trying to figure out what might be appropriate."

"You can't beat the Hi-Power, as far as I'm concerned. We debated on 4 magazines, which would have given them a full box of shells, but there really wasn't room. Last I heard, that gun dealer in Garden City still had Hi-Powers."

"It's going to have to wait for now, I can clear out around the buildings with the tractor and blade, but other than clearing the road to your place and Mike's, there's no way I'm going to plow a road all the way to town."

"Did the teacher send home the lesson plans like they did for Don and Sandy?"

"Yep. Although Jim called me a history teacher, June is doing the most to help the kids with their lessons."

"That guy in Garden City isn't an authorized Browning dealer, but he carries their pistols. I'd go for those and get them as soon as you can. You're not going to get a discount, so you'd better figure on shelling out about a grand per gun by the time you pay for tax, extra magazines and the like."

"And ammo."

"Yep, that's extra."

"How are Don and Jim getting along?"

"There's the age difference of course, but pretty well. I think that Don is slowly getting

him over being smart-alecky. He's going to grow up to be a fine man."

"Has Mike said anything about how Sandy and Mary are getting along?"

"Mary has a bit of a shell and might be a tougher nut to crack. Give it time, Randy. Time heals all wounds and wounds all heels."

"We're not trying to take the place of their parents."

"Would that you could. These aren't small children and they've been through a lot. A child's personality develops early, you know. Then it changes. I read that there are 8 distinct periods in the development of personality. Current, Jim and Mary are in the adolescence stage of growth and development, which represents the industry vs. role confusion stage of the psychosocial theory of development, occurs from 12 to 20 years of age.

"Adolescence is a transitional stage between childhood and adult life and is characterized by rapid physical growth and psychological, mental and social maturity. This stage of development officially begins at puberty and ends with person achieving a level of maturity enough to deal with and manage realities of life and be able to bear responsibility of himself/herself and his/her actions. The developmental tasks faced by the child at this age are accepting changes in the body and appearance, developing appropriate relationships with males and females of the same age, accepting the male and female role appropriate for one's age, becoming independent from parents and adults, developing morals, attitudes, and values needed for functioning in society.

"Adolescence is thought to be the period of emotional upheaval and rebellion, sudden changes of mood, shifting ideologies and clashes with authority. During adolescence, although emancipation from parents in order to achieve independence and learning to accept responsibility for one's self takes place, an adolescent still fluctuates between child-like dependency and stubborn independence. During this critical stage an adolescent is ambivalent since he or she does not like adults' control but still seek their guidance. In addition, sudden fluctuations in mood are common to which erratic behavior can be related. Peer groups play a critical role in the process of socialization and social interaction and self-concept is gradually acquired as a result of reactions of his peers towards him.

"An adolescent undergoes active mental maturity since an adolescent becomes capable of more than abstract mode of thinking and the capacity of receiving new information reaches its peak. This sort of development results in endless speculations about abstract issues. In spite of that, the adolescent still feels uncertain i.e. lacks the ability to direct himself/herself and the confidence to translate his/her thoughts and ideas into a definite course of action. Persistent arguing and pretended wisdom are characteristic features of adolescents. Moreover, an adolescent rethinks about matters of life he learnt to be true from his/her parents early in life. What the adolescent needs by the end of this stage is to find out what sort of person he or she is and what his/her abilities and

limitations are, therefore the period of adolescence can be called the period of read-justment."

"Gee thanks, Dr. Paul."

"Just remember girls and boys are different."

"Really, I hadn't noticed."

"Don't believe everything you read in books."

"I never would have imagined."

"You keep talking like that and Jim will never get over being smart-alecky."

o

In May 2004, members of the Italian National Library in Rome made an amazing discovery. Buried in their archives was an unknown manuscript by the famed prophet Michel de Nostredame, or Nostradamus (1503-1566). This manuscript was handed down to the prophet's son and later donated by him to Pope Urban VIII. It did not surface again until now, almost four hundred years later.

Due to the pressure and scrutiny of the Inquisition, Nostradamus was forced to scramble both the meaning and the order of his quatrains. He made sure humanity would not be able to use them until we had become sophisticated enough to decode them. That time has finally arrived.

"I'm afraid the making of World War III is actually taking place in front of our eyes."  
Prince Hassan of Jordan - March 26, 2004

Drawing on newly discovered Nostradamus manuscripts, a startling new view of the world is revealed. If you agree that signs like terrorist attacks, volatile Middle East, skyrocketing oil prices, and a growing China could lead to WW III - then you will find this book truly eye-opening.

With a total of eight chapters, *The Nostradamus Code: World War III* opens with an overview of the bewildering events currently unfolding on the world stage. You will find out why they are happening, and what you can do about them to protect yourself.

Next, the years 2006 through 2012 are explained in precise detail. Referred to by Nostradamus as the Time of Troubles, you will read hundreds of startling revelations regarding this era. The Time of Troubles is full of war, despair, and evil, but also of hope and promise. Use this book to enlighten yourself, your loved ones, your world, and your future. (Only \$XX in pdf form, about \$2 a chapter)

First you had to believe that any of the interpretations of those quatrains meant anything. Seems like all those Johnny-come-lately's were always proving this or that quatrain proved something, after it happened. And, if you knew exactly what he forecast and had been taking my advice, nothing would change. The old crystal ball is clouded, but there is something there... believe it or not, it's up to you. Iran warned the United States on Wednesday it could inflict *harm and pain* to match whatever punishment Washington persuades the UN Security Council to mete out over concerns Tehran is secretly seeking atomic bombs.

o

November beget December which by odd coincidence was the month that contained Christmas. During mid-December, the roads weren't fully blocked and I had a chance to get to Garden City and pick up presents for the kids. After all that trouble, June seemed to think that we should wait until summer to give the pistols to the kids. She had some ideas, probably from Don and Sandy and she managed to get to town before the roads closed for good. Marilyn, Rachel and she used Paul's 4 wheel drive pickup to make the trip. Little did we know that the roads would be closed until late March, in southern Kansas. The Bible is full of those begets; I think it has something to do with sex. Therefore, beget must mean gender.

For Christmas, June bought me 2 new saddles for the 2 Morgan stallions. I wasn't sure I was going to ride them, but she more or less made my mind up for me. Jim and Mary got new 10-speed bikes and dress up clothes. I hadn't seen Mary in a dress before and she was obviously becoming a young woman. Jim wasn't too happy with the sport coat and slacks, but June told him that he couldn't wear jeans to church. Not that we'd gone with the roads bad. I sort of figured I'd gotten June what she'd always wanted, a couple of kids, but still, no present under the tree would be trouble, so I got her a sexy red dress and added a note saying she could be 'the Lady in Red'.

I know, I've said it before, but...

*I've never seen you looking so lovely as you did tonight  
I've never seen you shine so bright  
I've never seen so many men ask you if you wanted to dance  
They're looking for a little romance  
Given half a chance  
And I've never seen that dress you're wearing  
Or that highlights in your hair  
That catch your eyes  
I have been blind*

*The lady in red is dancing with me  
Cheek to cheek  
There's nobody here  
It's just you and me*

*It's where I wanna be  
But I hardly know this beauty by my side  
I'll never forget the way you look tonight*

*I've never seen you looking so gorgeous as you did tonight  
I've never seen you shine so bright you were amazing  
I've never seen so many people want to be there by your side  
And when you turned to me and smiled it took my breath away  
And I have never had such a feeling such a feeling  
Of complete and utter love, as I do tonight*

*The lady in red is dancing with me  
Cheek to cheek  
There's nobody here  
It's just you and me  
It's where I wanna be  
But I hardly know this beauty by my side  
I'll never forget the way you look tonight*

*I never will forget the way you look tonight  
The lady in red  
My lady in red  
I love you*

Chris de Burgh wrote *The Lady in Red*. *The Lady In Red* had won six annual ASCAP (Association of Composers & Publishers) Awards, presented to acknowledge the record as one of the Top 20 most played songs in America during a 12-month period. During October 2000, Chris was invited to New York to receive a rare honor from the American-Irish Chamber of Commerce in recognition of his significant contribution to that community. According to de Burgh, the real answer was that this song was inspired by a moment when Chris saw Diane across a crowded nightclub, without at first realizing it was her. As a result he realized that often people never quite appreciate that the most important person in their lives is taken for granted, and how after a while you fail to notice the things that brought you together. This was the basis of the song but it wasn't written either for or about Diane.

Born in Argentina on October 15, 1948, Chris is the son of British parents. His childhood was rich in travel and experience; his father's career moved the family to Malta, Nigeria, Zaire and finally to Ireland. It was on the Emerald Isle – where Chris still lives, with his wife Diane and their three young children, Rosanna, Hubie, and Michael - that he found his musical feet. In the grand setting of the 12th Century castle which his parents converted into a hotel, he learned to play the guitar – and he had performed literally hundreds of concerts there to audiences of enthralled guests before even seriously considering a career as a musician.

Some things bear repeating. Obviously June liked the dress. But, my reward is none of

your business.

*Oh Stranger beware the life that you lead, is filled with the warnings you can or will not read; your castle has fallen, it lies in the sand, I heard your voice calling, I thought I felt the brush of your hand...* – Chris de Burgh, The Key, from Far Beyond These Castle Walls, 1975. (No, my favorite is Roy Orbison, he sang my song, *Only the Lonely*.)

*Dum-dum-dum-dum-dee-du-wah  
Ooh-yeah-yeah-yeah-yah  
Oh-woh-woh-woh-o oh-wa-wah  
Only the lonely, only the lonely*

*Only the lonely  
Know the way I feel tonight  
Only the lonely  
Know this feeling ain't right  
There goes my baby  
There goes my heart  
They're gone forever so far apart  
But only the lonely  
You know why I cry  
Only the lonely*

*(Repeat \*)*

*Only the lonely  
Know the heartaches I've been through  
Only the lonely  
Know I cry and cry for you  
Maybe tomorrow a new romance  
No more sorrow but that's the chance  
You've got to take  
If you're lonely heart breaks  
Only the lonely*

"Can I ride my bike?"

"Ok, but be careful of the snow, I need to blade off the area around the buildings again."

"We've never had new bikes before," Mary said. "Daddy was going to buy them when he got home. Mom couldn't afford them."

"Do you want to go ride with Jim?"

"It's too cold out, he's crazy."

## An Unlikely Outcome – Chapter 15

"Well, I suppose we should have gotten you CD players or something, but we didn't know what kind of music you like."

"Country Western."

"When are your birthdays?"

"April 16th."

"Do you both like the same songs?"

"Jim likes the gals and I like the guys."

"We'll figure something out."

◦

How did I happen to end up in Lakin, Kansas? I've been wondering that too, but can't remember. I searched the story for clues, but couldn't find any. I started this story between *A Home of Their Own* and *The Asian Question*, so maybe you know why. *God bless George Washington. God bless my mother.* Had to type that, it was running around in my head. Re-read both stories and still don't know about this one; Morgan Hill, CA and Alamogordo, NM?

◦

Jim only got to ride that bike one time until the snow got so bad that I could barely keep the area clear and it got down to -20°. We'd be ok if the snow didn't melt all at once and run off into the Arkansas dry riverbed. A Nuclear summer is a hypothetical scenario resulting from a nuclear war that would follow a nuclear winter. In this scenario, the amount of water in the stratosphere would increase, causing greenhouse warming of the surface. The nuclear detonations would also produce oxides of nitrogen that would then deplete the ozone around the Earth. This layer screens out UV-B radiation from the Sun, which causes genetic damage to life forms on the surface. The absorption of ozone also results in a heating of the stratosphere, which results in a further contribution to greenhouse heating.

If the theory was right, next summer would be hot and we'd get good suntans. That's why most farmers wear some kind of cap or hat, to shade their eyes and offer some protection against the sun. I always preferred wide brimmed hats and that why I got the kids cowboy hats and boots and jeans. Then again, it was only a theory and we couldn't know until summer came, if it ever came. How could the stratosphere fill with moisture if it was all on the ground? The burning of 526 Kuwaiti oil wells during the Persian Gulf War showed the effects of vast emissions of particulate matter into the atmosphere in a

geographically limited area; underneath the smoke plume the day time temperature dropped by  $\sim 10^{\circ}\text{C}$  within  $\sim 200\text{km}$  of the source.

Russian and US long-range nuclear weapons are still at *Launch on Warning*, which makes a purely accidental war possible at any time. Their basic attitude of confrontation and deterrence, carried over from the Cold War, is dangerous but will not easily be changed. It is essential and urgent to rid the world of the additional danger of an accidental nuclear war between them. While *lowering the alert status* of their nuclear weapons would not be consistent with current deterrence theory, it would be relatively easy and quick to eliminate Launch on Warning without losing the alleged stability of deterrence.

The avowed function of nuclear-armed ballistic missiles is *deterrence*. Deterrence is in theory achieved when a potential attacker is convinced that an attack will be unavoidably followed by retaliation so devastating that it would be irrational to attack in the first place.

As the accuracy of nuclear weapons advanced, it was realized that a massive pre-emptive salvo directed at command and control systems and retaliatory weapons could diminish or eliminate a capacity to retaliate. If either side believed it could achieve such a *disarming first strike*, it might be tempted to attack.

To avoid this weakening of deterrence through the pre-emptive destruction of an adversary's retaliatory forces, both sides explored the possibility of launching retaliation before the first impact of a pre-emptive strike - thus *Launch on Warning*. It first came about with the Titan II with stored hydrazine and nitrogen tetroxide aboard and was assured with the development of solid fuel as rocket propellant.

During atmospheric testing of nuclear weapons in the early 1950's the electrical phenomenon called *Electro-Magnetic Pulse* (EMP) was discovered. Around 1960 the US conducted a series of high-altitude nuclear explosions to investigate it, incidentally causing significant disruption of radio communications each time. The purpose was presumably two-fold: to explore the possibility that the phenomenon could be used by either side to enable a disarming first strike, and to study methods of protecting their own electronic equipment so that deterrence would be maintained even if the enemy was planning to use EMP. This possibility that electrical disruptions might prevent retaliation provided a second reason to adopt L-o-W.

The operation of the Russian Perimetr system is described by Yarynich in "C3: Nuclear Command, Control Cooperation. During a high-level alert, the National Command Authority issues preliminary authorization to a super hardened radio command and control center. The crew working at the center prepares to transmit a launch order by means of Perimetr command missiles which radio the launch codes to the silos. The launch order is transmitted only if three conditions are simultaneously met: the preliminary authorization has been received, there has been a complete loss of communications with the NCA, and positive signals of nuclear detonations are received from the different types of

sensors. Obviously, Perimetr cannot order Launch on Warning. Its purpose is to order *Launch After Detonation*, but only if first activated by the NCA and then NCA communication is lost.

Perimetr was a rocket developed for launch of a highly secret communications payload. This would be put in orbit or on a long high-altitude trajectory to provide back-up command and control of the strategic forces in the event of nuclear war.

A decree of 30 August 1974 authorized development under the supervision of Utkin at Yuzhnoye. The draft project for the new required factory test equipment was completed in December 1975, and that for the 15A11 rocket and its 15B99 payload in December 1977. Trials began in December 1979 and were completed in March 1982. The system entered service in January 1985 but was withdrawn by December 1990. The rocket was most likely based on Yuzhnoye's MR-UR-100, which would account for its rapid withdrawal from service after the collapse of the Soviet Union.

Another source said, "In addition, the Russian military appears to be continuing to maintain and even upgrade a series of communications systems built by the Soviet General Staff. Starting in the 1970s, the Soviet General Staff and strategic services build a massive and redundant set of C3 capabilities that linked the General Staff and command centers of the strategic forces with operational units. The essential purpose of the Cold War-era system was to ensure positive launch control is the ability to launch a retaliatory strike. As such, it was the military which had control of the launch codes and which was responsible for the execution of launch orders. One aspect of that system which has received attention in the West is the so-called *doomsday machine*, a set of sensors co-located with some of Soviet command centers that could detect signs of nuclear detonations and respond by triggering the launch of specially-equipped ballistic missiles that, once launched, would transmit launch codes to the ballistic missile force. The apparent intent of this system, called Perimetr, was to provide a final launch enabling capability should the Soviet Union suffer a successful decapitating strike."

Perimetr aka Dead Hand was the opposite of our Fail Safe system in that it was a Fail Deadly system.

The dead-hand system Dr. Blair describes today takes this defensive trend to its logical, if chilling, conclusion. The automated system in theory would allow Moscow to respond to a Western attack even if top military commanders had been killed and the capital incinerated.

The heart of the system is said to lie in deep underground bunkers south of Moscow and at backup locations. In a crisis, military officials would send a coded message to the bunkers, switching on the dead hand. If nearby ground-level sensors detected a nuclear attack on Moscow, and if a break was detected in communications links with top military commanders, the system would send low-frequency signals over underground antennas to special rockets.

Flying high over missile fields and other military sites, these rockets in turn would broadcast attack orders to missiles, bombers and, via radio relays, submarines at sea. Contrary to some Western beliefs, Dr. Blair says, many of Russia's nuclear-armed missiles in underground silos and on mobile launchers can be fired automatically. Source: NY Times

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It was a good thing the Russians didn't attack the US too. We didn't know if they were attacked for sure by China. Such was the sorry state of the news in a post-apocalyptic US.

Strongest AM radio stations in Lakin:

- KGYN (1210 AM; 50 kW; GUYMON, OK; Owner: TELNS BROADCASTING COMPANY, INC.)
- KBUF (1030 AM; 1 kW; HOLCOMB, KS; Owner: KBUF PARTNERSHIP)
- KIUL (1240 AM; 1 kW; GARDEN CITY, KS; Owner: DAKOTA COMMUNICATIONS LTD.)
- KRVN (880 AM; 50 kW; LEXINGTON, NE; Owner: NEBRASKA RURAL RADIO ASSOCIATION)
- KLTT (670 AM; 50 kW; COMMERCE CITY, CO; Owner: KLZ RADIO, INC.)
- KULY (1420 AM; 1 kW; ULYSSES, KS; Owner: KBUF PARTNERSHIP)
- KSCB (1270 AM; 5 kW; LIBERAL, KS; Owner: SEWARD COUNTY BROADCASTING CO., INC.)
- KOA (850 AM; 50 kW; DENVER, CO; Owner: JACOR BROADCASTING OF COLORADO, INC.)
- KKZN (760 AM; 50 kW; THORNTON, CO; Owner: JACOR BROADCASTING OF COLORADO, INC.)
- KMXA (1090 AM; 50 kW; AURORA, CO; Owner: ENTRAVISION HOLDINGS, LLC)
- KICA (980 AM; 50 kW; CLOVIS, NM; Owner: BROADCAST ENTERTAINMENT CORPORATION)
- KXXX (790 AM; 5 kW; COLBY, KS; Owner: WAITT RADIO, INC.)
- KLMR (920 AM; 5 kW; LAMAR, CO; Owner: COMMONWEALTH LICENSE SUBSIDIARY, LLC)

Strongest FM radio stations in Lakin:

- KANZ (91.1 FM; GARDEN CITY, KS; Owner: KANZA SOCIETY, INC)
- KSKZ (99.9 FM; LEOTI, KS; Owner: KBUF PARTNERSHIP)

TV broadcast stations around Lakin:

- KSWK (Channel 3; LAKIN, KS; Owner: SMOKY HILLS PUBLIC TELEVISION CORP.)
- KSNL (Channel 11; GARDEN CITY, KS; Owner: EMMIS TELEVISION LICENSE CORPORATION OF WICHITA)

●KAAS-LP (Channel 31; GARDEN CITY, KS; Owner: CLEAR CHANNEL BROADCASTING LICENSES, INC.)

Keep in mind that was before the war. You could write off Denver and Aurora, and some of the other stations never came back on the air.

Industries providing employment: Educational, health and social services (27.9%), Agriculture, forestry, fishing and hunting, and mining (14.0%).

◦

Once we got into late March, the roads began to clear a little and we started transporting all of the kids into Lakin to attend school. Paul, Mike and I took turns doing it at first because we couldn't get into the fields anyway. A man showed up from the extension office and inquired what we were going to plant this summer. I called Paul and Mike on the CB and we all sat down with him at the kitchen table to outline our plans.

"We are going to plant our usual crops, wheat, oats, corn and alfalfa. In addition, we're planting Timothy and barley for our draft horses. We've agree to greatly expand our garden and truck farm produce for the stores in Lakin and Garden City."

"How much land will you have under cultivation?"

"One and three-quarters sections lest the homesteads."

"When did you get draft horses?"

"After the war. Our supply of fuel isn't unlimited and one of these days, we aren't going to have enough to use our tractors."

"I see you're rather progressive, using wind turbines for electricity."

"Only two of us, Mike uses solar panels."

"I'm hearing a rumor that the federal government will be inventorying farms and forcing you to sell them a portion of your production. The word is that if you don't, they intend to seize your farm."

"They'd cutting off their nose to spite their face. Besides, I don't believe they can get away with that. They can't seize your property without due process of law. That's a 4<sup>th</sup> and 14<sup>th</sup> Amendment guarantees.

"I'm not disputing that; I'm just giving you a friendly warning."

"Will you be the one enforcing it?"

"I live in the community; I'm on your side. If necessary, I'll resign my job, get a gun and join you. You know fellas we had a war but I haven't heard anyone say that the Constitution still isn't the Supreme Law of the Land."

"There were about 30,000 people in Garden City, another 1,000 or so in Deerfield and about 2,000 in Lakin. We think that many of the farmers plan to follow our lead and together, we can produce enough food for maybe 35,000 people. If the feds want to play hardball, so help me God, I'll burn my crops first."

"Do you all feel the same way?"

"I do," Paul said.

"Count me in," Mike added.

"And the rest?"

"No one likes to have the feds tell them what they must do with their own property. Maybe one or two won't agree, but we'll explain it to them in a way anyone can understand."

"If you're serious about this, see the Sheriff. He's intent on organizing some kind of collective resistance. There's a fair amount of mining in Kearny County and that means explosives. I assume you have a means to protect yourselves."

"You might say that."

"I see guns and holsters hanging on the pegs. The feds have better weapons than those old cowboy guns."

"Good for them."

The problem with that guy from the extension service was he was giving us a little information in hopes of getting a lot more back. We knew him, but weren't sure where his loyalties lay. Better we should wait and find out before we started gushing information. We didn't have anything that wasn't copasetic with Kansas law that we discussed openly, not even among ourselves. Maybe a few sticks of dynamite would come in handy though (for blowing stumps).

You may have noticed that few of the Midwestern states had state defense forces. That included Kansas; we had the Kansas National Guard. Although every state has laws authorizing State Defense Forces, only twenty-five states, in addition to Puerto Rico, had active State Defense Forces, each with different levels of activity, state support, and strength. The total for the entire Country is less than 20,000 people.

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"You kids have been here for 4 months and it's time to have a talk. Are you happy here? Do you have everything you need? Is there anything that June and I need to do to improve your stay?"

Mary remained silent, more often than not; Jim spoke for both of them. He looked me in the eye and shrugged.

"You know, Randy, now that the roads are open, we need to get to Lakin and get these kids something for their birthdays."

"When is that?"

"April 16th."

"Is there anything special that either of you want?"

"I'd like a rifle," Jim finally responded.

"Oh, what kind of rifle?"

"Like the one my Dad used in Iraq."

"A M16 is a select fire weapon and they're illegal in Kansas. About the closest we could come would be an AR-15. That's a pretty expensive weapon, Jim."

"Well, you asked."

"I guess I'd like a CD player and a few albums."

"June, did I actually hear Mary speak to me? My goodness, we'll have to get her exactly what she wants. What's your opinion on buying Jim a rifle?"

"Well, he will be 14."

"So will I," Mary added.

Later, June and I discussed their birthday gifts and decided that whatever we got one we'd also get for the other. We had the Browning pistols still put up that she'd gotten in Garden City. It was slim pickings, all I could find were 2 Bushmaster 20" A2 Chrome Lined Barrel Target Rifles. The dealer had plenty of the 30 round magazines and even some of the Bushmaster 40 round magazines. My first choice would have been an ArmaLite M-15A2 and my second a Colt HBAR. June came along and picked out the CD player and albums; and, of course, the new clothes. I have a few clothes that I've had most of my adult life, but teenagers don't seem to know when to quit growing. That hadn't been my plan of how I was going to break the 2 kids into shooting. We'd start with

the 9422s, work our way up and then back down to their BOB gun and ARs.

Sandy seemed to have more influence on Mary than we first thought. When it came time to hand out those birthday presents, Mary didn't object to either the Bushmaster or the Browning, although she handled them like a person might handle a venomous snake. If I never handled a firearm before, I might be leery too. Having a birthday party for twins somehow translated into 2 cakes; probably so they each had their own candles to blow out. We had a choice, chocolate or white cake with homemade vanilla ice cream!

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The home visit from the lady with the County went well. We had to put away all of the firearms, I'll bet she'd have had a hissy fit. The kids must have indicated to her that they wanted to stay. She checked out their rooms, clothes, school progress and visited with each of them for a bit. I hadn't really put Jim to work yet, assigning him some minor chores but none of the less pleasant tasks one finds on a farm, like mucking out the stalls. The 4 Morgan mares were due to foal this summer and we weren't about to risk the health of the Clydesdales by breeding them before they were 4.

Mike solved the explosives issues because he had all of the necessary permits. The dynamite came in 8" long sticks about 1" thick. Mike got an assortment of detonating caps, mostly Match type caps, the most common type found worldwide, but also some pyrotechnic blasting caps that used fuse. I assure you, none of us looks like Clint Eastwood. It is noteworthy that improvised bombs made with agricultural-grade AN are less sensitive and less efficient than the explosive-grade variety. Explosive grade AN contains about 20% air. It is better to use too much FO than too little. Timothy McVeigh made an ANFO bomb and he was executed. Didn't your mommy ever tell you not to play with matches?

Mike's explanation was that he had to blast out some rocks and stumps to provide for more arable land. The dealer said there must be a lot of stumps and rocks, to which Mike replied, "I wouldn't have to risk my butt if someone could get some in those grocery stores." Commercial dynamite hadn't been manufactured for some time, having been replaced by Torpex, a water gel. The dealer sold Mike military dynamite. Military dynamite is a composite explosive that contains 75 percent RDX, 15 percent TNT, and 10 percent desensitizers and plasticizers. Military dynamite is not as powerful as commercial dynamite. Military dynamite's equivalent strength is 60 percent of commercial dynamites. Because military dynamite contains no nitroglycerin, it is more stable and safer to store and handle than commercial dynamite.

Interlocal agreements allow cooperation between the governmental units within the county. The city and county share joint ventures for law enforcement and fire protection, sharing of equipment and personnel, and construction and zoning projects and changes. The sheriff's department has a staff of at least ten full-time officers, a sheriff, an Undersheriff, and an active reserve department. Local service is provided 24 hours a day.

The Kearny County Fire and Rescue consist of at least twenty-two active members who provide fire serves for all of Kearny County.

The improvised *hand grenades* Mike made had a 6 second fuse. Personally, I think he's seen too many of the Eastwood movies, he brought home 3 boxes of Marsh Wheeling cigars. They aren't made in Wheeling, West Virginia anymore. They come from National Cigar Corp. in Frankfurt, Indiana.

"I thought you were kidding about buying explosives. You apparently bought what that County man said, huh?"

"Nah, I just want to blow out a few rocks and stumps."

"And of course it makes sense to only have a 6 second fuse on a stick of dynamite."

"You wouldn't want them to throw it back at you, would you?"

"Who are them?"

"Anyone who thinks he can take my production or my land."

"I wouldn't put much stock in what the extension man had to say. I think he was on a fishing expedition."

"Uh-huh. I wouldn't have put much stock in the Chinese attacking the US with nuclear weapons, either; they had to know that we'd wipe them out. They went ahead and did it anyway and we ended up in a bomb shelter. Nobody builds a shelter like that to protect himself and his family against a tornado."

"Are these things ready to go?"

"Nope, the fuses and caps are in that small box and the dynamite in the other box. They're ready to go; all you have to do is insert the cap and light the fuse. I wouldn't hold it for over a couple of seconds before I threw it, if I were you."

"You know Mike; we never had to shoot our Assault rifles in anger or defense of ourselves. What makes you think that this year will somehow be different?"

"Randy, it hasn't been a year since the attack and barely a year since we had the flu pandemic and those terrorists introduced the plague. I'd be willing to bet that major portions of the Country are out or nearly out of food and what that guy from the extension service said was truer than you'd apparently like to believe. Why shouldn't we be prepared, just in case he was telling the truth?"

"Don is going to be a senior this year and Sandy a junior. From what I can see of those two kids of Paul and mine, Sandy's senior year is going to be pure hell."

"She won't be going to school alone, there's Jim and Mary."

"That's not the same thing and you know it."

"How's the baby?"

"Stefanie must have gained a pound and I'd say that Sue probably cut about 15. She said she wanted to get rid of the fat she gained when she was pregnant."

"Speaking of which, I have mares foaling soon."

"No you don't, you got them bred in August and they won't foal until July."

"That's right, too much to think about I guess."

"How did it go with the County lady on the kids?"

"They're still here, so I guess they wanted to stay. Sandy must have done a number on Mary; she accepted both the Browning and the Bushmaster."

"Good. It appears that we're going to get a fair amount of runoff this year, it's melting a bit fast and it suddenly getting warmer."

"There was a theory that claimed a nuclear winter would be followed by a nuclear summer with high levels of moisture in the stratosphere. I think the ultra violet light was supposed to be higher too. It had to do with a depleted ozone layer."

"It might very well happen. It's going to be plenty wet now, but what about when we need some rain?"

"I really don't know, Mike. Watch the sky, I guess. Red sky at night, sailor's delight. Red sky at morning, sailor take warning."

"I suppose, but I'd rather have the National Weather Service or a copy of the Farmer's Almanac."

"Good luck, Mike."

## An Unlikely Outcome – Chapter 16

In this Country, two groups of people are especially interested in the weather, the Weather Bureau and farmers. In many years, the farmers have plenty of water, but it all comes at the wrong times. The fields are too wet in the spring and that delays planting. Then during the summer when they really need the water, there isn't a cloud in the sky. Global warming, do you suppose?

The UV Index is categorized by the WHO as follows: 0, 1, 2 = LOW; 3, 4, 5 = MODERATE; 6, 7 = HIGH; 8, 9, 10 = VERY HIGH; and, 11+ = EXTREME

I asked June how much sun block we had and what the strength of the stuff was. She said 2 tubes with SPF 15, it was based on PABA. SPF 10 blocks 90% of UVB, 20 blocks 95%, 30 blocks 96.7% and 60 blocks 98.3%. The best sunscreens protect against both UVB (ultraviolet radiation with wavelength between 315-280nm), which can cause sunburn, and UVA (380–315 nm), which damages the skin with more long-term effects, such as premature skin aging (UVA=Aging). Most sunscreens work by containing either an organic chemical compound that absorbs ultraviolet light (such as oxybenzone) or an opaque material that reflects light (such as titanium dioxide, zinc oxide), or a combination of both. I knew what I was buying on my next trip to town, all the tubes I could find with SPF 30.

According to the best information I could find, if you'd sunburn in 12 minutes, SPF 10 would extend that to 120 minutes or 2 hours. The SPF is an imperfect measure of skin damage, because invisible damage and skin aging is also caused by the very common ultraviolet type A, which does not cause reddening or pain. Normal sunscreen does not block UVA as effectively as UVB, and an SPF rating of 30+ may translate to significantly lower level of UVA protection

If you've checked out Kearny County or you live here then you know that 46% of all of the agricultural production is livestock. We were about to add to that a fraction and introduce truck farming in a major way. Better to preserve the diesel fuel for when we had to use it and to power Paul's truck. Those Clydesdales could get actual experience in addition to their training pulling wagons this summer and that would give us time to try and find some horse drawn implements. We thought our best chance was either Historical Societies or someone who specialized in restoring the old horse drawn equipment. The guy in Bird City built Chuckwagons, and he couldn't be the only person in Kansas doing that sort of thing; I wonder what the guy in Paola had?

There was always biodiesel, but unless we grew crops and extracted the oil, we were out of luck. Soybeans would yield about 48 gallons of fuel per acre. I was trying to remember an ad I'd seen for a biodiesel processor. *In addition to the standard DIY Kit, we deliver an 80 gallon water heater. A full set of directions is included along with an hour of telephone support. It only takes a few hours to assemble. Make your own fuel for as little as \$0.70 per gallon! This processor produces 55 gallons of useable fuel in about three hours of hands-on processing time.*

They supplied: 12 Gallon per Minute Utility Pump, Ball Valves, Temperature Gauge, Mostly Assembled Plumbing, Connectors, Clamps & Tape, Safety Glasses, Gloves & Apron, Assembly and use instructions, 80 Gallon Water Heater, 85 Gallon Cone Bottom Tank, 15 Gallon Methoxide Carboy, Hydrometer w/Cylinder, Plastic Lab Set and pH papers. You supplied: Drums for Methanol and Oil, Vegetable oil, Methanol, and Red Devil Lye [off the market, you have to buy NAOH]. I was looking at the ad I'd printed off the internet once. I even had a recipe for making biodiesel, somewhere.

December 22, 2004 – HUTCHINSON, KS – Air quality is a critical issue for workers who use diesel engines in confined spaces, and using biodiesel fuel in mining equipment is one way to help protect their health. Today, the Kansas Soybean Commission (KSC), Hutchinson Salt Company and National Biodiesel Board (NBB) hosted a tour of the salt company's mine in Hutchinson, KS. The Hutchinson Salt Company is the first mine of any kind to use B100 (100 percent biodiesel).

"Paul, what do you know about biodiesel?"

"Only that they charge more for it than regular diesel."

"That was then and this is now. I have an ad for a biodiesel processor that the seller claims will make biodiesel for 70¢ a gallon."

"You'd need soybean oil and we can grow the beans but how do we extract the oil?"

"There are three main methods for extracting oil from soybeans. These procedures are hydraulic pressing, expeller pressing and solvent extraction. Hydraulic pressing is one of the oldest pressing methods. This is a batch press procedure that requires hand labor and currently is no longer used for soybeans. Expeller pressing has replaced the hydraulic pressing procedure for extraction of oils. Soybeans are not commonly used in this method either. Solvent extraction of oil seeds can be performed by equipment of either percolation-type or immersion-type. Percolation extractors are considered to be more efficient than immersion extractors because they are able to handle large capacities of product in limited areas of space. One commonly used percolation extractor is the rotary extractor and enclosed vertical system that moves perforated baskets using a rotary motion around a central vertical shaft. The liquid solvent (hexane) is pumped over a bed of flakes, percolates down through the bed and leaves through the bottom through a perforated plate, mesh screen, or wedge wire screen bar system. Flake thickness is a factor in oil removal efficiency. An increase from 0.02 to 0.06 mm decreases the extraction rate 80 times. At the end of the extraction cycle the flakes are allowed to drain and are dropped into the discharge hopper. Miscella is pumped counter-current to the flow of the flakes. Counterflow is very important to solvent extraction (as well as desolventizing) as it helps to remove oil more efficiently than parallel-flow systems. The miscella becomes richer as the oil is extracted from the soybean flakes."

"Yeah so, what does that mean?"

"The extracted flakes contain about 35% hexane, 7% to 8% water and 0.5% to 1.0% oil. For processing into livestock meal or edible soy products, solvent is reclaimed from the flakes in a desolventizer-toaster (D-T) unit. The miscella leaving the extractor contains about 25% to 30% oil. After it is filtered to remove suspended fines, the solvent is reclaimed through a series of evaporators. The first stage evaporator yields miscella containing 65% to 78% oil. The second stage evaporator yields miscella containing 90% to 95% oil. Vapors from both evaporators are recovered through condensers and recycled back to the extractor. Removal of final solvent is accomplished through an oil stripper. The oil stripper consists of a steel cylindrical vacuum column in which live steam flows upward counter-current to the flow of oil. The oil, free from extraction solvent, is cooled to ambient temperature and pumped to storage for further processing."

"I asked, what does that mean?"

"It means for a moderate investment, we can produce our own soybean oil to convert into biodiesel and have all the soybean meal we need to feed our livestock."

"Starting to sound good, but what is miscella?"

"Where the raw material is soaked and dissolved in solvent (i.e. Hexane) forming a mixture called miscella. This miscella drains from the cake where the solvent is removed by evaporation."

"I think we might be able to handle hydraulic pressing."

"How about we plant an extra 40 acres in soybeans and see how it works out? I think that might give us about 1,900 gallons of biodiesel."

"I was thinking more about the availability of chemicals and the processing equipment. We can fabricate a hydraulic press arrangement and won't have to worry about the chemicals. Didn't I hear you could make biodiesel with ethanol?"

"I have, but it's more complicated. Here's a summary of the information I have on my computer:"

*Conversion of vegetable oil into ethyl esters for use as Biodiesel fuel involves transesterification of the oil triglycerides to mono-esters of the component fatty acids. To accomplish this conversion, raw oil is treated at room temperature with ethyl alcohol in the presence of potassium hydroxide as a catalyst. During the process, the glycerol which is produced is insoluble in the ester product, and being heavier, settles out carrying most of the dissolved KOH catalyst with it.*

*Upon initial settling, some of the undesirable, emulsion-forming by-products may remain in the ester layer, causing problems in the washing stage. It was discovered (by tracking the process with a glycerol determination) that most of these products could be re-*

*moved by simply restirring the glycerol into the ester, adding water and letting the mixture settle out again. After draining off the glycerol/water layer, the product (ethyl ester) can be easily water-washed to remove residual alcohol and potassium.*

"And, if we happen to make a little too much pure alky-hall, so much the better," Paul laughed.

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It is the mid-1980s. An aggressive Soviet leadership orders troops marched to the border of West Berlin, and then decides to invade West Germany with multiple armored tank & troop divisions. In Lawrence, Kansas – on the border with Missouri – a family is preparing for the wedding of their eldest daughter, and Dr. Oakes (Jason Robards) is keeping busy in his role as chief of surgery in the small University Hospital at Lawrence. These people go on with their daily lives but are drawn closer to the possibility of a nuclear war, as the Russians use a nuclear ballistic missile against a West German city, and then attack a US warship in the Persian Gulf.

The Americans strike back by hitting a Soviet ship, and then the Russians hit NATO regional headquarters with a nuclear warhead! People start creating makeshift fallout shelters in their basements, but many are caught off guard when, 1 at a time, nuclear missiles are launched from their silos along the Kansas – Missouri border. USAF officers then announce that 300+ ICBMs are inbound to the US, and 2 of them strike Kansas City, Missouri! Many are killed outright, but still more must face the danger of radioactive fallout. Now, the characters we follow are living in a barren, devastated world - devoid of electricity, safe drinking water, and food – and filled with radioactivity, starvation, and disease... in the horrific aftermath of *The Day After*...

Just for your information, those missiles are gone. California stereo shop owner Chris Malone never dreamed he eventually would become a land tycoon in Kansas. He is the new co-owner of a 28-acre Pottawatomie County spread that includes a private landing strip and a 15,000-square-foot subterranean home guarded by a 400-ton retractable steel front door. No ordinary ranch, Malone's newly acquired property is an abandoned Department of Defense intercontinental ballistic missile site that was operated until 1965 by the 548th Strategic Missile Squadron headquartered at the former Forbes Air Force Base in Topeka. Malone acquired the property once owned by reputed Seattle drug kingpin Gordon Todd Skinner at a sheriff's auction in September, perhaps the most complicated and bizarre Kansas real estate transaction in recent years.

The 46-year-old Malone says he has no plans to move to Kansas to manage the old Atlas-E missile coffin, silo and command bunker, which includes two 4,000-square-foot above-ground buildings that would provide immediate-occupancy space for potential factory or warehouse use.

The missile shots they used in the movie were Minuteman III missiles. Schilling AFB, McConnell AFB and Forbes AFB, all in Kansas, had Atlas E, Atlas F and Titan II but no

Minuteman missiles. McConnell is in CONUS Air Mobility Command, Forbes Field is an ANG Station and Schilling was closed in 1965.

The film is set mostly in Lawrence, Kansas, which was chosen by the screenwriters as a way to dramatize how nuclear war would affect everyone. During the Cold War, it was theorized that Lawrence, Kansas would be one of the few cities completely unaffected by nuclear war as it is near the exact geographic center of the United States. The scenes of Air Force personnel aboard the Airborne Command Post, in the command center receiving news of the incoming attack, and in the silo launching their missiles, are footage of actual military personnel during a drill, and had been aired several years earlier in a CBS documentary series, *The Defense of the United States*. In the original footage, the silo is *destroyed* by an incoming *attack* just moments before launching its missiles, which is why the final seconds of the launch countdown are not seen in this movie. After watching this, President Ronald Reagan sent a pile of suggestions to director Nicholas Meyer how it should be edited.

When the missiles are being launched from the Kansas base, there are mountains in the background. There are no mountains in Kansas. When Dr. Austin is explaining the effects of the Electro-Magnetic Pulse (EMP) from the nuclear blast, he says. "It's all theoretical. It's never happened before." In actuality, the United States detonated a 1,450 kiloton warhead at an altitude of 248 miles, 9 July 1962, in the Dominic Starfish Prime nuclear test. Due to its altitude, the explosion spread an EMP wave that caused notable outages and damage in Oahu, Hawaii, 800 miles away.

I believe they should show *The Day After* every year until people remember what a nuclear war looks like. The movie was released by ABC TV in 1983 and they had hotlines to deal with the calls. People didn't believe then and they didn't believe the morning July 4, 2009. They believe now. Whiteman AFB in Missouri had Minuteman II missiles until the last silo was imploded on December 15, 1997

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Did you think Tim McVeigh would blow up the federal building in Oklahoma City? Nobody thought that terrorists would fly jets into the World Trade Center Towers or the Pentagon. There was concern over the H5N1 virus, but that \$7 billion was too little and came too late. People will survive as long as there is earth to stand on and air to breathe. If it wasn't one person doing it to another, there was always Mother Nature with high winds and water. You might survive and you might not, but have you thought what you would do if you did? FEMA won't put you up in a hotel forever, assuming there are hotels left to hold people. You can lead a horse to water, but you can't make it drink. How can a person afford to sink \$40,000 into preparedness when the price of gas is over \$3? A piece at a time, that's how.

Spring came earlier than we thought it would, and faster, swelling the Arkansas, an unlikely outcome. All those dams downstream would hold water and allow for continued irrigation. The heat would cause the seeds to sprout, but would we have water through-

out the summer? The question was timeless, we had it every year, but this summer looked to be far warmer than normal and we didn't have the weather service to tell us what to expect.

We could plant every square foot of arable land, extra soybeans for the oil for biodiesel and the meal to feed the cattle and hogs. Twenty acres went into timothy, mostly to produce seed for even more timothy for the following year when we'd have full sized draft horses to share the load. We needed the correct screens for the combine, because timothy seed required smaller screens.

We would also plant extra corn to convert to ethanol. We added barley so we could mix COB. We moved early and with great urgency, trying to be the first to find the horse drawn implements. The words of the man from the extension service echoing in our ears, warning us that we'd be operating with a new set of rules and might have to resort to force to keep what we had. Pondering over plans to somehow extract the oil and attempt to produce biodiesel and keep the equipment running, trying to avoid depression at the impossible task that lay before us, we'd do what we planned or maybe die trying but we'd produce all the food we could and distribute it.

"Randy, I wouldn't put it past the government to try and seize our farm production to try to feed the survivors, but how many will there be after the flu, plague, fallout and so many with almost nothing to start with. These are desperate times, filled with uncertainty, and diminishing resources. Do we have any idea who is in control? Does our local emergency management agency really have a workable plan or are we playing it by ear? With this many things coming one after another, does anyone really know where we go from here?"

"We go to Lakin and see what Kearny County has in place. Our three farms have been geared up anticipating a future focused on the farmers pulling together to supply the communities in the area and exporting what we can to help the remainder of Kansas and other areas using any and every means available. We've made assumptions based on a general loss of technology. Up to now, we've identified what we need to accomplish that and enjoyed success in putting it together. Will the schools be open next year?"

"Well, if they aren't Mike and I expect Don and Sandy will probably push to get married and start a family. Any ideas where we're going to house them?"

"House trailer?"

"That might work. We could probably find one in Lakin; there are several hundred mobile homes in the City and County."

"Now, what about security?"

"Randy, we have rifles, shotguns, handguns and dynamite. What else do we need?"

"I don't know and that's why I asked. June and I were infantry, you were Force Recon. Was Mike in the Service?"

"Marine infantry."

"I don't see that we're short on much unless you need something more powerful."

"We can get by. I'm curious; did you get some cans in Colorado?"

"We've never broached the subject, but I do have them for the M1As."

"What brand?"

"Surefire and they cost as much as the rifles."

"We have M1As, AR-15s, M1911s, Browning Hi-Powers and shotguns. We should be covered on weapons and we do have that Fire Department radio if we need to call for help."

"From a 10 officer Sheriff's Department? Yeah right."

"Didn't that guy from the extension service say something about the Sheriff putting together some kind of force?"

"I think he called it a collective resistance."

"I guess we'd better find out what that's all about."

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We went to Lakin to see the Sheriff, he'd know about any emergency management organization and we were curious about the resistance. We had maybe a couple of dozen major questions to put to him. Kearny County utilized Reserve Deputies to help cover the County. Maybe that's what that guy from the extension service was talking about.

"Sheriff, I'm Randy Webster, and I believe you know Paul and Mike."

"What can I do for you?"

"We have several questions. A man from the extension service came by and indicated you were putting together some kind of resistance. We're also wondering about a rumor that the feds might try and grab our production. The 3 of us have come up with our own plan, but we needed to know how well it fits in with the plans the County has made to deal with this emergency."

"I've taken on extra Reserve Deputies and waived some of the requirements. I suppose that's what he was talking about. Interested?"

"Maybe," Paul replied. "To continue, we're going to increase our livestock production, begin to produce biodiesel and even grow enough garden produce so we can help supply the grocery stores. We've taken steps to partly convert to using draft horses for some of the farm work."

"You have one of the Fire Department radios don't you?"

"One, yes."

"And didn't Doc Williams tell me that you and your wife were Intermediate level EMTS?"

"Yes, we didn't take the paramedic training. However, Doc has done a lot of supplying us with good used medical equipment and he's only as far away as the radio."

"How much biodiesel?"

"Our test run this year is to see if we can produce about 1,900 gallons."

"Soybean oil?"

"Yes."

"What else are you raising?"

"Cattle, hogs, chickens and horses."

"We've been lucky. I take that back, it's been more like a miracle. Fewer died from the pandemic than Doc anticipated because we got some vaccine. Don't believe we had many, if any, cases of the plague. Like I said, we're adding to our group of reserve deputies, and I'd be pleased if you'd join up. What else can I do for you?"

"The feds?"

"Mostly rumors. We haven't heard or seen anything official. Listen, I can see that you 3 are carrying and you know the law; doesn't apply to law enforcement."

"Well... Paul, Mike?"

"Why not?"

"What do we have in the way of emergency management here in Kearny County?"

"Dean Krehbiel is the coordinator. The state is divided into 7 regions and we're in the

Southwestern Region. Randy, I understand that Doc more or less set up an emergency backup clinic on your farm. He should have gotten you hooked up with our CERT."

"Heard anything on the schools?"

"The Board is discussing whether not they're going to try and open them next fall. They might be doing it through a home schooling program like they did last winter. How are those 2 kids working out?"

"Seems like they may have decided to stay; Mary is slowly coming out of her shell and Jim is getting over being so cocky."

"They've been through enough, good to hear it. Well, what about the Reserves?"

"Is there any problem with us producing alcohol to use in our biodiesel operation?"

"Don't drink too much of your overproduction."

"Fellas?"

"Where do we sign? Is it in blood, or will a pen do?"

"We'll provide you with radios, but you have to provide everything else. We have a brochure with all of the details. There is no pay for the job, but it does come with a few privileges and a whole lot of responsibility. If that biodiesel thing works out, I'm sure the county will buy any excess production."

That's how we became Reserve Sheriff's Deputies for Kearny County, Kansas and ended up with badges and radios. The Kansas statutes exempt law enforcement officials from the various prohibitions in the law against NFR weapons, concealed carry and so forth. It didn't matter; we didn't officially own any NFR items. All of the elected county officials must be related, they all have an (R) after their names. The Sheriff seemed to know a lot about our business affairs, was that the guy really from the extension service?

With 4 tractors, Paul had 2, we got into the field the moment the ground permitted and worked from dawn to dusk preparing the soil and planting. The first Saturday we had free, we set up a range and began to get Jim and Mary familiar with firearms. Apart from some initial timidity, Mary seemed to overcome her outright fear of firearms and was as good as or better than Jim when it came to hitting targets. One session on the range doesn't make anyone Carlos Hathcock, but there was potential. They wanted to do some riding, but with our mares in their present state, we sent them to Paul and Marilyn's and they went riding with Don and Sandy.

When a neighbor decided to give up the ghost and move to town, Mike bought his half section, giving him a full section the same as Paul had. We pitched in and planted the

additional land, in soybeans and corn. We also acquired his equipment, fuel supply, an additional house and livestock, cattle and hogs. Ray and Susan moved into the larger farmhouse on the other side of the section, once again leaving Mike and Rachel with a guest house.

In Kearny County the Reserve Deputy Callouts are infrequent and in past times usually related to a major traffic accident or an event requiring additional police presence. June and I were already on the CERT, I was surprised that the Sheriff didn't know that, he seemed to know everything else.

With ample moisture and sun, we soon had crops popping out of the ground and with them weeds. I got Jim to help me mount the cultivator and we cultivated what row crops I had. I was still trying to put together all of the equipment we'd need to make biodiesel. The easiest part was the 100-gallon hot water heater. A metal shop in Garden City could fashion the tanks from the pictures I had and it's not that hard to build a still. Paul was working in what little spare time he had on a means to squeeze the oil from the beans and Mike transferred the fuel from the farm tank on the other section to his and had the tank cleaned in preparation to using it to store biodiesel.

Statistics show that converting corn to alcohol results in a net increase in energy by 30%. Because alcohol will absorb water from the air and less than pure alcohol would increase the difficulty of using it to produce biodiesel, I used a special process, explained later. We created a medium-large sized garden of about 2 acres not counting the sweet corn. That was June and Mary's department and unless one of them asked for help, we stayed out of their way. June used a tiller between the rows and Mary hoed between the plants.

When the green beans came in, they were putting in very long days and what they couldn't can went to the stores in town. The green onions they thinned also went with the beans. I was figuring on about 4 tons of potatoes and had 8 rows of corn the full length of the garden. The grocery was buying empty jars from anyone who still had them and hadn't sold them off to Don and Sandy. The girls were doing 4 batches of green beans a day, using 4 7-quart pressure canners at a time, 112 quarts of beans about every other day for a while there. On the in between days, they were making strawberry preserves.

Paul hauled 8 fat cattle and 20 hogs to town to be processed to give the grocery stores some meat to sell. We had the brood hens sitting now trying to expand the flock. Jim got introduced to what it takes to keep a barn habitable and he didn't much care for that. There is no way that one man can farm by himself. As spring became summer, it looked to be a pretty good year for crops. The right combination of soil, weather, and management techniques are needed to reach the 100 bushel per acre genetic yield potential of soybean. Even though growers can't control the weather, they can improve soybean yields by having a good understanding of how a soybean plant grows and using good crop management techniques. Soybeans should follow corn, wheat, barley or other grass crops in a rotation to minimize disease carryover and to optimize the nutrient utili-

zation within the soil profile. Soybeans should not follow alfalfa, dry edible beans, canola, or sunflower where white mold disease has been detected.

## An Unlikely Outcome – Chapter 17

Good year or not, the days weren't long enough. I don't know how Paul and Mike managed, working 640 acres on each farm with just 2 men. Part of their secret lie in the fact that they were using low till methods while I was doing full till. The most important cultivation occurs just as and after the new seedling is emerging from the ground. After the first month or so, low or minimum tillage has very little to do with yield and depends more on the weather than anything. If it's dry, no tillage increases the yields the most, according to various Agricultural Colleges; apparently, the ground crusts preserving the moisture.

One year to the day, July 4, 2010, we celebrated not the nation's independence but for surviving the first year. Not once in that entire year had we been bothered by the villains one comes to expect in the aftermath. Other places, however, were all over the news. MS-13 and other gangs were running wild in some parts of the county. We credited Sheriff James Jabone and his small staff of Deputies for making that possible. The radiation must have killed off both the pneumonic plague and the H5N1 virus.

Any FEMA involvement in the affairs of the state of Kansas probably occurred in Topeka and the Kansas City area. They weren't welcome in Kearny County and in theory, unless you asked for their help, they should stay away. Be that as it may, we were just finishing up eating when our Sheriff's Department radios issued an all Stations and Reserves alert.

"Crap, we haven't gotten uniforms yet."

"The radio said all Stations and Reserves, so that must include us. What did you bring for weapons?"

"M1A and .45."

"So did I," Mike added.

"Ladies, hold down the fort and keep an ear on the Fire Department (volunteer) radio."

We piled into Paul's pickup and off we went. According to the radio, the problem was in Deerfield (pop. 1,000). The next radio report said something about bikers. Let me say, for the record, that most biker groups are really nice folks and in general, they get a bad rap. That's, however, a generalization because certain biker groups are criminals plain and simple and primarily earn their living dealing in drugs, etc. The world of gangs and threat groups can become very complex. Knowing this, it helps to divide these groups into some basic categories that will form a firm foundation to learning and understanding. Most gangs you will encounter will fall into one of these basic categories: Street Gangs, Prison Gangs, White Supremacy Groups, Motorcycle/Biker Gangs, Subversive Groups and Cult Groups.

It took all of 20 minutes to arrive in Deerfield, partly because we didn't have lights and siren. A group of bikers, not those upstanding ones I mentioned were in town attempting to have their own 4th of July celebration. As the day had worn on, and the beer flowed, tempers flared between the town's folk and the visitors. It looked like we were outnumbered 10 to 1. We had guns, they did too. Crap.

The Sheriff radioed Garden City under the Mutual Aid provisions and more than doubled our numbers, somewhat evening out the balance of power. Yes, Virginia, most small towns in Kansas have Mutual Aid Agreements. Our first job was to separate the bikers and the residents and that mainly consisted of getting the residents to return to their homes. Once we had the parties divided, the bikers went back to their party, which by now was getting LOUD.

The Finney County Sheriff's Office shares the Finney County Law Enforcement Center with the Garden City Police Department on the main floor with Municipal Court and District courtroom lower level. The Finney County Jail is located on the top floor. The Sheriff's Office consists of the Sheriff, Undersheriff, Jail Administrator, and a Captain overseeing a staff of 86 people assigned to ten different divisions. The Garden City Police Department has perhaps 50-60 officers and a Citizen's Academy that sometimes provides reserves. When they only had us outnumbered 2 to 1, we set about collecting weapons.

"People listen up," Sheriff Jabone said. "We can do this the easy way or the hard way. The easy way is for you to give up your weapons and they will be returned to you when you leave the Finney and Kearny County jurisdictions. The hard way will be to cram all of you into a jail that was never intended to hold as many people as here are in your group. The charges will include carrying concealed weapons."

We got the guns and did it without a single shot being fired. Shoot 'em ups are for the movies, Miami (two FBI agents were killed and five wounded in Miami during a confrontation with robbery suspects) and North Hollywood (an armed confrontation between two heavily-armed and armored bank robbers). One might consider those isolated events near total failures on the part of law enforcement. All California cops now carry semi-auto M16s, so if you screw with the bull, you get the horn.

I couldn't locate Don Johnson to find out what Miami uses. His ex-mother-in-law, Tippi Hedren lives near Palmdale, CA. At the end of shooting *Mister Kingstreet's War* (1973), she discovered that the big cats used in the production had no place to go and would likely languish in small cages. This prompted her to obtain a parcel of land on her own to establish a home with a natural setting for retired big cats. She named it Shambala and it exists to this day.

o

"WELL?"

"Biker gang in Deerfield got into it with the locals. The Sheriff called in Mutual Aid and we got their guns. End of story. I'll have to check my drawers."

"You could have called!"

"I plumb forgot about the 2-meter radio and we didn't have a Fire Department radio."

By this time, we had made our way up to the .45 Colts and back down to the Browning's and Bushmasters. Mary and Jim seemed to acclimate well to the various weapons and each was provided with their own Lever Action Winchester and single action revolver and cowboy loads. Mary declined to carry any weapon unless it was 'a real emergency'. When the mares foaled, we got 3 fillies and a colt. He might end up a gelding; I already had 2 Morgan stallions out of different bloodlines. Maybe not, who knows?

The Winchester kicked more than the Bushmaster rifle; hence we need to work out the flinch before we went to the combat weapons. On horseback everyone carried a Winchester saddle gun and the single action revolver. I was more afraid of the horse getting permanently spooked than one of the kids getting hurt and that made me pound the warning into their heads.

"You NEVER, NEVER fire a firearm while you're in the saddle!!!"

"Why not, they do it in the movies?"

"Either sitting on a dummy or a horse so tranquilized that it was nearly unconscious. It may be possible to train a horse to ignore gunfire, but these Morgan's aren't trained and I don't want them spooked. Can you imagine if one of those Clydesdales spooked? Don't shoot a gun near a horse unless the gun has a silencer."

"When do we get silencers?"

"Maybe never, Jim; I can legally own them but I'm not sure I can get them now."

Suppressors work best on a bolt action rifle but can be used in semi-autos, sometimes requiring the use of special mechanisms, called "recoil enhancers" or "Nielsen devices", decouple the mass of the suppressor from the barrel. The device is built into the suppressor. This especially true for pistols using the design of John Moses Browning. The most commonly suppressed firearms in the US are those in the .22LR caliber. The Ruger Mark II is often used.

o

We weren't sure if we were supposed to carry those badges all the time or just when we were called up. That biker gang had just wanted to party, it was probably the Deerfield residents that stirred them up in the first place.

"Randy, can I have a dog?"

"What kind of dog?"

"A big dog, like a German Shepherd."

"You're planning on staying then?"

"I guess, we talked it over. Just don't get the idea that you're our parents."

"Does Mary feel the same way?"

"She's shy, so she said I could tell you."

"A German Shepherd?"

"Yes sir."

That was a first, Jim calling me sir. Something in his tone indicated that he wasn't being smart-alecky. June and I talked it over and it made sense to have a guard dog, especially for when Jim and I were in the fields. I asked the Undersheriff if he knew anyone in Lakin with German Shepherd puppies. He said to ask Doc Williams, if anyone knew, it would be Doc.

"Randy I know a family who has a litter of pups. How are those kids doing?"

"It appears that they decided to stay, just found out myself."

"You get them into town, you hear. I need to catch them up on their immunizations and make sure they have the rabies vaccine. It wouldn't do if they ran into a rabid animal out there on the farm."

I think Doc believes that an ounce of prevention was worth a pound of cure.

"Here's the address of the folks with the puppies. Everyone ok in your neck of the woods?"

"We're using SPF 30 sunburn cream, but getting monster tans."

"I noticed. I heard the UV Index was hovering around 10. That's not good. Got one girl in the hospital with sunburn so bad we're treating her shock and 2nd degree burns. She blistered very badly."

"I'll bet she's blond."

"Yep, very fair skinned."

[Relax I'm not picking on blonds. I only know 2 blond jokes. One was named Kathy and the other Marie. (Signed) Ima Idiot]

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"What's his name?"

"Mary and you get to name him. He's your dog."

"Come here Shep. Come here Shep. Darn, he doesn't know his new name."

"Give him some time, after you've repeated it enough, he'll know. Mary and you have to go to Lakin tomorrow."

"What for?"

"Shots. Doc Williams wants to bring your immunizations equal to what we all have."

"But I don't like shots."

"I don't believe anyone really likes getting shots, Jim. The problem is that you kids are 14 years old and most of those shots only last about 10 years. I doubt you've been inoculated for smallpox, either. They stopped that before you were born. Have you seen any packs of dogs or any wild animals around the farm?"

"No, why?"

"Rabies. You can and will be immunized against it too. If you see a pack of dogs, avoid them. Your dog has had his rabies shot and the 7 in 1. He also had vaccine for heartworms. He has to get shots every year because some of the vaccines wear off."

"Oh, ouch."

"You don't want Shep to think that you're afraid of getting shots do you?"

"I suppose not. Come on Shep, let's go meet Mary."

o

I had always thought that if we had a nuclear war, the Country would turn into a much different place than what I was seeing, another unusual outcome. The Midwestern states were turning soybeans into biodiesel and meal and that had been going on for quite some time. Those folks up in Iowa had gone to gasohol back in '79 and in recent years, all of the gasoline available in Iowa was 10% alcohol. Iowa had inexpensive gas when compared to other parts of the Country before the war.

o

Those extra 320 acres Mike bought were going to make a bigger difference to us than we had imagined. We had a total of 1,400 acres under cultivation between the 3 farms. The other 40 acres were homesteads and gardens. One man can farm about 160 acres, the size of the original homesteads when America was growing. Some of the tasks require help, baling for example. Assuming one pulls the baler and drops the bales in the field, it still takes 3 people to load the bales, stack them and haul them back to the barn. One person can pull a combine but when the hopper is full, it takes another to haul the grain back and put it in storage.

It was a learning experience and before long, we had hired people from Lakin to help on the farms. A paper dollar was no longer worth the paper it was printed on if it ever had been. The Country struggled to return to the gold standard that Franklin Roosevelt had eliminated. The official exchange rate was \$25 an ounce for silver and \$1,250 an ounce for gold. The rich just get richer; Paul was almost a millionaire without selling his section of land. How much gold would 155 head in '76 buy at \$124 an ounce? In 1975, cattle were going for about 33¢ a pound and 155 cattle went about 194,000 pounds. That bought 516 ounces of gold. At \$1,250 an ounce, those coins were worth \$645,000. His father should have kept the coins he bought for \$160 an ounce.

Instead, he'd sold the coins, numbering 780 according to Paul, for \$468,000 and used the money to buy 480 acres of land at \$2,000 an acre that he subsequently paid off. Another American success story; made by milking 40 head of dairy cattle and farming a section of land. He'd had a hired man to help but when he died, the hired man had retired. Paul never said how'd he'd managed and I didn't ask.

One troy ounce equals 31.1035 grams and a Peace Dollar weighed 26.73 g and was 90% silver, about .77 of pure silver troy ounces per coin. Stated differently, 1 gram = 0.03215 troy ounces. Those silver dollars were only worth \$19.25 each. Gold was worth 50 times the value of silver and now it was official. The thing was, gold and silver weren't trading at the official exchange rate and I could get \$25 for a silver dollar. Paul had Krugerrands, in all denominations, 1 oz., ½oz., ¼oz. and ⅛oz. I had enough envy to turn me green.

o

"How many people did you hire?" Paul asked.

"None, June and Mary are doing the gardening and canning and Jim and I are milking the cows, feeding the livestock and tending to the fields. I've just about got the still done and if I'm building it right, we'll be able to produce biodiesel as soon as we have oil"

"I'm working on the hydraulic extractor as fast as I can Randy. It's a cylinder with a plate that's driven by a hydraulic cylinder. It can press the beans with about 20,000 foot

pounds of energy."

"A 10 ton press? Is it big enough?"

"I won't know until I try it and I can't try it until it's done. I still have to cut the holes and install the screens."

"Did you know that there is an ethanol process for extracting the oil?"

"Does it make any difference which way we extract the oil?"

"Actually no. That hydraulic press you built was the most common method of extraction during WW II. Its labor intensive and they now extract most soybean oil using Hexane in the solvent extraction process."

"Hexane is a petrochemical isn't it?"

"I think so."

"I'd assume that if we can't buy diesel fuel, we can't buy Hexane."

"Good point. Besides, it's very dangerous."

o

The way they tested ethanol for extracting oil from the soybeans required the solvent to be heated before it would work. After the ethanol and soybean oil were extracted, the oil was heated to boil off the alcohol and the vapors run through a condenser and the liquid was collected and reused. According to the scientist who tested the process, the oil extracted with ethanol had a more pleasant odor. Unrefined soybean oil sticks because it contains linolenic acid (a tri-unsaturated fatty acid that derives its name from "linseed" oil) which turns the oil rancid. For hydraulic pressing, the beans were ground or flaked, steamed and tempered in a cooker, then formed into a cake in press cloths and pressed at 500-4,000 psi. From about 1911 until the early 1930s hydraulic presses were fairly widely adapted to soy oil processing, although their percentage of total processing capacity during this period was probably less than 25%.

In a screw press, crushed and presteamed (tempered) soybeans are fed into the machine so that a continuously revolving worm shaft (somewhat like that of a kitchen meat grinder) forces them through a strong metal barrel or cage, whose walls are perforated with many thin slots, each about 0.01 inch (0.2-0.3 mm) wide. Under pressure of 5-10 tons or more per inch and temperatures for friction and pressure reaching 150° C (302° F), the oil is pressed out and drains through the narrow slots. A choke nut at the discharge end of the press allows the operator to control the pressure and temperature. The higher the pressure, the higher the temperature and the more oil expressed. At the discharge end, the cake emerges in thin sheets, which are broken up by a revolving

cake breaker.

In 1948 Beckel, Belter, and Smith of the USDA Northern Regional Research Center reported that ethanol-extracted meal and oil both had better flavor and lighter (better) color than their hexane extracted equivalents, and that food products using flour ground from the meal (breads, meringues, whips, and candies) were superior in flavor, color, and nutritional value. Unlike hexane, ethanol was a natural, nontoxic food (the same found in beer or wine) and a renewable resource derivable from farm crops by fermentation. Solvent extraction gave higher yields of oil. While mechanical pressing systems recovered only 70-80% of the oil present in the soybean (leaving 4-6% oil in the presscake), solvent systems were able to recover about 95% of the oil. In 1981 100 pounds of soybeans yielded typically 72.2 pounds of soybean meal (44% protein), 18.3 pounds of crude soy oil, 7.0 pounds of hulls, and 2.5 pounds of shrink or manufacturing loss.

For typical feed use, the solvent-laden flakes are passed down through a desolventizer-toaster (DT), which takes out the hexane and "toasts" the flakes with moist heat. In the DT, a tower of steam-jacketed compartments, the hexane is stripped off by heating the flakes, first with live steam in the top compartment, then with dry heat at up to 110° C thereafter. The heat also inactivates antinutritional factors (primarily urease and lipoxygenase) in the flakes. After being dried and cooled, the flakes can be mixed with the soybean hulls (seed coats, removed during cracking) then, using a hammermill, ground to a meal, which contains 44% protein. Adding back the hulls lowers the crusher's costs per unit weight of meal produced. If the hulls are not added back, the meal will contain 49% protein, and sell for a slightly higher price. The meal is then sold to livestock feed compounders; the 49% protein meal is used mostly in broiler feeds.

o

I figured we had to learn to walk before we could run. The ADM plant north of Kansas City, Missouri had been closed due to environmental concerns. Big deal, Kansas City was gone to the large-sized city Heaven in the sky. Kansas City was the 7th largest city in population (between Cleveland, Ohio and Omaha, Nebraska). As of the 2000 census, the city had a population of 441,545. Combined with Kansas City, Kansas, the population was 588,411, but the entire metropolitan area (in both states) was approximately 2 million. Thing is, you can't nuke a metropolitan area.

"Shep is getting bigger."

"Do you really know why I wanted a dog?"

"Sure, why?"

"I figured if we had a dog, you couldn't mess with Mary and me."

"Huh? I don't understand, Jim where did that come from?"

"After mom died the first family they put us with was bad."

"What do you mean, bad?"

"They hit us and Mary and I ran away. So that lady put us with a second family but that guy had his hands all over Mary. We ran away from there too."

"How far down the line were we?"

"Third."

"Have we been unduly harsh?"

"No."

"Has anyone touched either you or Mary?"

"No."

"Is that why you decided to stay?"

"I don't like shots, but other than that, you've been good to us. We have much more than we had when mom was alive."

"She had a tough go, huh?"

"Her picker was broke."

"What do you mean?"

"Every guy she dated only wanted to get her into bed and wasn't interested in gaining another man's kids."

"I see what you mean. So, how did that turn out?"

"She quit dating. Then she worked nights and we were in school during the day. By the time she got home at night, we were in bed, sound asleep. Then she didn't take time to get a flu shot and didn't notice how sick she was until it was too late."

"You had it rough, didn't you?"

"She loved us, that why she worked. I miss my dad and I miss my mom. It wasn't fair what happened."

"Life isn't always fair, Jim."

"When will we be able to ride the horses?"

"After the colts and fillies are weaned. That will be in November, so probably not until next spring. It was my plan to only breed two of the mares after this round so we'd have a couple to ride. I don't believe I want you riding the stallions just yet."

"Why not?"

"Let June and me ride them first and get the friskiness out of them. It's been a bad year in terms of riding, so much work to do and only 24 hours in the day."

"When?"

"How about this weekend? Do you remember what I told you about horses and firearms?"

"Don't shoot a gun near a horse."

"Right and when Mary and you go riding, I want you to have the saddle guns and those revolvers."

"It has been 13 months since the war, why do you always act like you're expecting trouble, Randy?"

"Have you seen the way people grab up the food we take to Lakin? We can barely get it off Paul's truck and into the grocery stores. The people are used to going to the store and getting whatever they want. They haven't been able to do that for a year now and even though most of the farmers have been supplying what they have available, it won't be until we get all of the crop processed, especial the potatoes and onions that they will have the basic staples. Right now, people are subsisting on fresh vegetables and products that can be made from flour and corn meal plus the meat Paul is providing along with a few other farmers."

"How many potatoes are we growing?"

## An Unlikely Outcome – Chapter 18

"I'm hoping for about 4 tons. The sweet corn is about gone and we won't get many more pickings off the bush beans. But the carrots should be about ready to pull as well as the onions. We took those small cucumbers into town and I'd guess everyone canned some kind of pickles. We also have several varieties of squash and cantaloupe, but they late season varieties. Do you know what heirloom seeds are Jim?"

"No."

"That a seed that you can reproduce and it will breed true. Most of the hybrids people planted won't breed true next season from the seeds the people are saving. That field of Timothy that Paul panted is partly for feed for the draft horses and partly for seed. I believe that our biggest crop will be soybeans and we'll convert that into meal and diesel fuel. We have 400 acres of soybeans and that should yield over 18,000 gallon of bio-diesel. We have all we need and can sell some to Lakin and Deerfield. Plus we'll have both kinds of soybean meal to feed the livestock and the chickens."

"Won't those tractors wear out?"

"My 900 series Ford was built during the late 1950s or early 1960s. And we have parts to rebuild all of our tractors. How are you adapting to the teams?"

"Really good, I don't push them and they don't seem to mind pulling those wagons."

"If for any reason you have to dismount the wagon and move away from the horses, don't forget to attach those chin anchors. And don't forget to wear your revolver."

"What exactly are you worried about?"

"I told you, packs of wild dogs and certain wild animals that might have rabies."

"We got our rabies shots."

"You got the first one of three, Jim. You need the second in another week and the third two weeks after that."

"Do you store blood?"

"No, we store frozen plasma. Universal whole blood donors are type O negative and universal plasma donors are type AB negative. Plasma, if properly stored can last up to a year and it contains the platelets to aid in coagulation. You've seen that special locked freezer in the basement haven't you? It is extremely cold and that's needed to preserve the plasma."

"Why didn't you take paramedic training?"

"Time mostly, it takes a full year and passing a national exam to be a certified Paramedic. The next step would be a physician's assistant and next a full MD."

"But you have that lab equipment and a portable X-Ray."

"Those are mostly Doctor Williams. We make a preliminary exam doing a differential diagnosis and then lab test to focus on the illness. We're hooked up to the Doc with a radio and he tells us what to do. June and I are also members of the Community Emergency Response Team and I'm a Reserve Deputy Sheriff."

"Should I be a farmer or try and become a Paramedic?"

"You can be anything you want Jim. Most people, me included, start out wanting to be something far different than what they end up doing for a career. The one thing that is totally important is an education. Knowledge is power and could someday save your life or even Mary's. The things you are taught in school are the sum of mankind's experience up to now. The things you learn on the farm are the sum of what my grandfather taught my father and my father taught me plus each of our individual experiences."

"Do you like farming?"

"I do now, but it was a shock when dad died and I got the farm. If things go well, I may just add another 160. I don't know that I can ever get as big a Paul or Mike, but we can try. That is if you decide you want to farm."

"Say I do, then what? What if I get married or something?"

"Don't cross that bridge until you get to it, but we can always build another house, two if Mary marries a farmer and they want to live here too. Farming is not a growth industry, everyone is worried about rural flight, but that was before the war. For the next few years, I expect to see some resurgence in farming activities while the Country is rebuilt. However it works out, since June and I don't have kids of our own; I'd expect the Mary and you will inherit this farm someday. I like to be give you each a quarter section or possible a half section if we do well."

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"Mary said Jim told her that you were thinking of leaving them the farm."

"I mentioned it was all June. Long time until we have to think about that."

"You could have mentioned it to me before you talked to Jim about it."

"It just came up in a conversation when Jim asked me if he should be a Paramedic or a farmer."

"What else did you talk about?"

"How tough the kids had it since their dad died."

"Mary mentioned that second place. That pervert ought to be in jail."

"What goes around comes around, June. One of these days things will even out."

I had no idea how we could afford more land. The price was off, but still... When the weekend came, June and I rode the stallions to mellow them a little and let Jim and Mary take a shot. They had been riding Paul's Quarter Horses and they seemed to be able to handle the Morgan's just fine. June and I went back to the house and heard the fire department radio squawk.

"This Randy, are you trying to reach me?"

"John Hansen apparently had a heart attack. You're closer, so do what you can until the ambulance gets there."

"Ok Doc."

June and I grabbed our ready pack and headed to John and Rose Hansen's place about ½ mile down the road. As far as I knew, John didn't have a history of heart disease. When we got there, he was flat line and not breathing. June started CPR while I set up the defibrillator. I ended up zapping him several times but got no response. It was hard to say how long he'd been dead; Rose said she found him when she came in from the garden. All that training, all that equipment and wouldn't you know, we lost our first patient. June consoled Rose and I waited for the ambulance. I called Doc on the radio and told him we'd gotten here too late. He prescribed a mild sedative for Rose and said that it sometimes happened, not to let it get us down. He also said to send Rose back to town in the ambulance along with John.

o

I let Paul and Mike know that John had died. To think, he'd made it through the flu and the terrorist attack and even WW III only to drop dead of heart failure. There are several types of heart failure, Myocardial Infarction, Heart Failure and Hypertrophic Cardiomyopathy, just to name a few. Shorthand, think: blockage, wearing out and enlargement. Clinical death occurs when a patient's heartbeat and breathing have stopped. Since breathing rarely continues when the heart is stopped, clinical death is synonymous with cardiac arrest or cardiac death. The reversal of clinical death is sometimes possible through CPR, Defibrillation, Epinephrine injection, and other treatments.

Resuscitation after more than 4 to 6 minutes of clinical death at normal body temperature is difficult, and can result in brain damage or later brain death even if cardiac re-

suscitation is successful. Longer intervals of clinical death can be survived under conditions of Hypothermia. Hypothermia also improves outcomes after resuscitation from clinical death even if body temperature is not lowered until after resuscitation. Today, where a definition of the moment of death is required, doctors and coroners usually turn to "brain death" or "biological death": people are considered dead when the electrical activity in their brain ceases (persistent vegetative state). It is presumed that a stoppage of electrical activity indicates the end of consciousness. However, suspension of consciousness must be permanent, and not transient, as occurs during sleep, and especially coma. In the case of sleep, EEGs can easily tell the difference.

Doc said that John could have been dead for up to 30 minutes before we got the call. He said that he suspected heart failure after visiting with Rose. He was surprised that John hadn't been in to see him; heart failure is a progressive disease. His diagnosis was congestive heart failure (aka heart failure). We all attended the funeral on Tuesday and after Rose came up to June and I and asked if we could come by one day soon.

o

"If I told once, I told him a thousand times to go see Doc Williams. Stubborn, he was, said it wasn't anything he couldn't handle."

"He should have retired after the war, Rose. It's been tough this past year. What plans do you have?"

"Want to buy the farm?"

"Want to, yes. Don't know as we could afford to."

"Land values are off, Randy; I won't be able to get more than \$160,000 for it. I can't farm it and I think I'll move to Lakin and live with our daughter. If you could come up with, say 20% down, we could farm equal shares and I'd apply my share to the balance."

"We can go 25% down, Rose and the share arrangement would be fine."

"No, 20% is fine. I won't need much and it will provide a steady income to my daughter if something should happen to me. Don't know how you're going to farm another quarter section without a hired hand, though."

"No livestock?"

"John sold them all off before the war; said it was too much work. He didn't even bother to plant this year; I should have known something was wrong."

"June, what do you think?"

"It will solve the problem you created for us."

"What problem is that?" Rose asked.

"Randy and Jim, our foster child, were visiting and Randy told him that someday we might leave them the farm. 80 acres wouldn't do much to support a family."

"A body can barely make ends meet on a quarter section," Rose agreed.

o

"Randy what are you going to plant on that new farm?"

"Corn and soybeans, we're going to begin producing biodiesel in a major way. The Sheriff seemed to think that Kearny County would buy all we could produce."

"Any idea who you might hire to farm it?"

"I'm going to have to ask around. Rose said she'd take care of the paperwork and I have the bank cash out another CD and transfer the money to wherever it has to go, probably an escrow account."

o

According to the feds, a corporation may own NFR weapons in certain circumstances. Recently it had been suggested that a person should form a LLC to own and such firearms or devices. A limited liability company provides limited liability for its members if the corporate status is maintained. The LLC is a newer entity type that is very exciting as it offers some great benefits and features for its members. One difference between a LLC and a regular corporation is that a LLC is recognized by the IRS as a "pass through" tax entity. You could have a Kansas LLC formed for about \$400. The term "limited liability" refers to a certain level of protection that is afforded to the owners of a corporation. Corporate law dictates that the owners of a corporation shall not be personally liable for the debts of the corporation. The liability of the corporation is generally limited to the initial investment of the shareholders.

June suggested that we form a LLC and incorporate the property for both farms into the corporation. Maybe, if Topeka was open for business. A corporation may own NFR firearms if possession of the firearms is somehow related to the business, e.g., assigned to their security people or the business is actually a security firm. Our lawyer wasn't named J. Noble Daggett, but he knew his way around a law book. He fixed it up for us and suddenly all of our property was held by the corporation.

Before the deal was even completed, Rose moved to Lakin, but she left about  $\frac{2}{3}$  of her furniture because her daughter didn't have any place for it. It was really too late in the year to hire a farm hand, there weren't any crops planted, on the new farm, but I wanted to get the fence down between the 2 places and I thought Jim and I could use help with

the harvest. After that, we'd have tons of corn to turn into feed and alcohol and soybeans to turn into meal and oil.

The scale of our operation wasn't big enough to process all of the corn and soybeans. Making another still was the easy part; getting another biodiesel converter would prove much harder. I went ahead and ordered the parts for 3 more converters, one for Mike, one for Paul and one for each of my farms.

Jason Ralston was 31 years old, married with 2 kids and raised on a farm. His wife Karen was also raised on a farm and their kids, Jason 9 and Daniel 7 were just typical kids. Jason had lost his job and was looking for work. That applied to several people in the area, but of all the people I talked to, Jason seemed to be the best fit. June and I hired him and moved them into the other farm house. I explained that he could help me with harvest, get that fence down and help us produce biodiesel all winter long.

If we could produce 4 55-gallon batches a day at each of the 4 converters, we'd have 880 gallons a day or about 4,400 gallons a week. We could easily refill our fuel tanks and sell fuel to Kearny County and/or the City of Lakin. I have a tendency to dream big. A person can produce 2.6-2.8 gallons of alcohol per bushel of corn. One gallon of ethanol would be mixed with about 5 gallons of oil to produce the biodiesel. Excess alcohol is normally used to ensure total conversion of the fat or oil to its esters. The beauty of the thing was that we could recover the alcohol and use it over.

For every 100 bushels of corn, we'd get 2,600 gallons of alcohol, which would require about 10,400 gallons of oil. That converts to 217 acres of soybeans to every acre of corn dedicated to the production of alky-hall. Plus, the meal and the dried mash could be used to feed the livestock. We devoted 1,000 acres to biodiesel production and we had 5 acres of corn and 995 acres of soybeans. We'd end up with a little excess alky-hall. I was going to need a few new white oak barrels.

Those 995 acres of soybeans would produce about 48,000 gallons of oil and would require 960 gallons of ethanol. We were assuming a yield of 40 bushels to the acre, but the extra heat gave us 60 bushels per acre and that produced 72 gallons of oil per acre or 71,640 gallons of oil. We could get about any price we wanted for the biodiesel and we settled on \$6 a gallon, these were our neighbors; we didn't want to gouge them. 50,000 gallons at \$6 a gallon produced \$300,000 worth of fuel. Should have that farm paid off in no time, especially with an extra 150 acres of soybeans.

o

"Damn, that was the best yield I've had in a while."

"What did we average, 60 bushels?" I asked Paul.

"Yeah. We should have planted more of the acreage into soybeans. You were smart buying that farm from Rose, now you have a half section. James Jones owns the other

half section and he's getting up in years. All of their kids took off and went to the university and don't want to farm."

"We still need hay for the horses, Paul. Although, it doesn't look like we'll be using those Clydesdales for much labor."

"True, but we can breed them at 4 years of age. One more year then we can double our stock of draft horses."

"Two more years before we have foals."

"Picky, picky. So what are we going to do, just blend the biodiesel with our existing diesel fuel?"

"I'd prefer to do that. Running that old tractor on pure biodiesel would be a real problem. That would dissolve all of the rubber."

"What will you end up with?"

"Probably B20. I don't feel like doing the math, but it will be quite a while before I'm up to B100."

"Marilyn said you incorporated."

"Yeah, we formed an LLC and put all the land into the corporation. I suppose you heard that the School Board voted to hold classes this year."

"Don told me. Will your kids be carrying fanny packs this year?"

"BOBs? You bet; they can get a locker at the store like Don and Sandy share."

"Don's going to graduate this year and I think Sandy and he will probably be getting married after she graduates."

"That's no particular surprise, Paul"

"You spotted it right off didn't you, in the shelter."

"Let's say that I observed that they seemed to be getting along very well. It will be a while before Mary and Jim are out of school, ninth grade this year."

"Where are you putting them when they've graduated and are married?"

"If I was to buy Jones's place, it would give us one house. Might build a new house for June and me and move the other into our house. We could put in a manufactured house on that old place with the buildings on the other quarter sections of Jones's."

"You could do the same and put the other kid in the manufactured house."

"I've thought about that too, Paul, but it's going to depend on what June wants to do. Where are you going to put Don and Sandy when they get married?"

"You have a good idea, Randy, there's that set of old buildings on the other half section where the house burned down. We could probably rebuild the basement and set one of those manufactured houses on it."

"Are we going to drive the kids to school this year?"

"Don is. He passed the full test (vision, written, and driving). I supplied the affidavit showing at least 50 hours of adult supervised driving, with 10 of those hours being at night, by a licensed driver at least 21 years old." (Effective July 1, 1999, a violation for transporting non-sibling passengers is a moving violation, but only when you're caught.)

"What's he going to be driving?"

"I picked up a good used quad cab Dodge Ram 3500 with that diesel engine. It has 4WD and an auxiliary fuel tank plus a winch."

"Is it your truck or his truck?"

"Neither. Marilyn talked me into one of those LLCs."

"What made you decide to do that?"

"We'll be producing food and selling it directly to the grocery stores plus selling fuel to the County and City. Too damned much exposure. So we did what you did and I think that Mike is going to do it too."

"Being I have a corporation and am a reserved Deputy, I was thinking about upgrading some of our weapons."

"Really, what did you have in mind?"

"H&K USP Tactical in .45ACP with suppressor. I was also thinking about that H&K UMP45."

"A submachine gun?"

"Yeah. I know, I know, we've never even had to fire the weapons we have, but that's not a reason not to buy it."

"Where do you get it?"

"Not in Kansas, H&K doesn't have any Kansas dealers."

I didn't locate a dealer who had the weapons I wanted in stock, so much for that pipedream (Etymology: from the fantasies brought about by the smoking of opium: an illusory or fantastic plan, hope, or story).

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We did the ethanol while Paul separated the oil from the beans. This had been very poorly planned; we need more storage for the soybean oil and the ethanol. I had to take responsibility for that, it was my idea. We didn't need 4 stills either, one was more than enough. I was using the sour mash process, putting some of the previous batch in the new batch of cracked corn.

One of the reasons the pandemic had been so bad was explained in a NY Time's article that appeared long before the pandemic. It seems that hospitals didn't have enough ventilators. June and I had the disposable ventilators that Paramedics used, the Hartwell Medical SUREVENT™ Disposable Automatic Resuscitator. They cost us about \$300 for a case of four.

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Do you have any idea how long it takes to write this junk? 166 hours to compose 180 pages, that's how long it takes.

◦

What happened to the US in 2009 was more likely to happen in 2006. Have you seriously read the news, lately? H5N1 is in 4-5 African Countries, in Poland and Greece. Bush wanted \$7 billion to fight the flu and we needed about \$21 billion, we were an accident looking for a place to happen. Does anyone have any doubt what Israel will do if Iran goes ahead with their nuclear program? If they do Iran, they might just as well do all the Muslim Countries. Pakistan is a Muslim Country and they are miffed at the US over the deal with India. If Pakistan gets into it, it will surely involve India and that seems to be the trigger that China is waiting for. The Cold War isn't over, it just has different players and when would you strike? How about during the worst pandemic in the history of the world? Why not toss in a terrorist attack using an illness that complicates the differential diagnosis?

It won't snow enough in southwestern Kansas to close the roads for 3 months? Sorry, maybe Carl Sagan was right. And a nuclear winter begets a nuclear summer, there's that gender thing again. And we all know that that Tired Old Man knows nothing, just like Sgt. Schultz. In 1965, Bing Crosby Productions cast Banner as Sgt. Schultz in the wartime sitcom *Hogan's Heroes*, a take-off on Billy Wilder's *Stalag 17* (1953) but with more humor and less drama. The bumbling Dutch uncle that Banner assayed was a

continent apart from the wickedly evil Nazis he specialized in during the war.

Spectacularly inept as a guard of Allied prisoners of war, Sgt. Schultz was prone to ignoring the irregularities that transpired in the fictive Stalag 13, bellowing "I know nothing! I see nothing! NOTHING!" Another bit of irony, besides John Banner being Jewish and playing a guard in a POW camp... is that like his co-star on Hogan's Heroes, Robert Clary.... John Banner was in a concentration camp prior to his release and travel out of Nazi Occupied Germany (in the early part of the Nazi control of Germany, a trip to a concentration camp was not an automatic "death sentence"). So John Banner was lucky to leave just before the Nazi policies changed.

"There is no such thing as a cuddly Nazi. Maybe Goering was cuddly to his wife. He wasn't cuddly to the city of Rotterdam. Schultz is not a Nazi. I see Schultz as the representative of some kind of goodness in any generation."

Corporal Louis LeBeau, Robert Clary, has a tattoo on his left forearm, "A5714," from his time in a German concentration camp during WWII. He was the youngest of 14 children; most of whom died in the Nazi concentration camps. He was (his wife died in 1997) the son-in-law of Eddie Cantor.

His identification with Nazi roles notwithstanding, Werner Klemperer was in real life a Jew who fled with his family from Nazi Germany in the 1930s. He served in the US Army during World War II. When he was offered the Col. Klink role, Klemperer only agreed to do it if the show's producers promised that Klink would never succeed in any of his schemes. He was also an established attorney, who successfully defended Robert Clary in a case brought against him after Bob Crane's murder.

Al Jolson, Danny Thomas and Neil Diamond played *The Jazz Singer*, who had a different name in each of the three movies by that title. Al Jolson's reported last words: "Oh, God, this is it! I'm going!" The son of a cantor, Jolson first sang before audiences in his father's synagogue. So successful was the film that Columbia decided to make a sequel, *Jolson Sings Again* (1949), which remains the only biography sequel in film history. In 1950 and against doctor's orders, Jolson went to Korea to entertain his favorite audience, American troops. While there his health declined and shortly after his return to the US he suffered a massive heart attack and died.

## An Unlikely Outcome – Chapter 19

All that moisture in the stratosphere decided that it didn't want to stay there. The second winter was not as cold as the first year after the attack, but man, did it snow. We were cranking out 4,400-gallons of biodiesel every week, enabling Kearny County to plow the roads. Rose didn't get a payment the first year because we'd taken over the farm long after crop season. I wanted my fair share of the biodiesel revenue because I had to pay Rose and wanted to buy the Jones' 320 acres.

If we planted 95% of our land in soybeans, we'd have 1,540 acres of beans and we should get no less than 73,000 gallons of oil. 10 acres of corn and 20 acres of hay would be the perfect ratio to maximize our production. We'd gotten a smaller 4th cutting this past year on the alfalfa and wouldn't need that timothy after all. And, rather than raise barley, we bought it from the elevator. We had 70,000 gallons of oil due our method of extraction. My share wasn't very big, only 10% of the \$300 grand, not bad and my diesel tanks were full. Next year, I kept telling myself.

But, 95% of 320 acres was 304 out of 1,540 acres, making my share the second year 20%. Could I do it? I owed Rose \$128,000 and that Jones's farm could cost me \$320,000 maybe a little more. I'd be in debt at least \$384,000 assuming James would sell the land to me for \$1,000 an acre. However, it would increase my share to 33% of the revenues and 1,824 acres if soybeans would produce about 87,500 gallons of oil; more if we improve our extraction method or changed to a different crop, like canola. I stood to earn as much as \$160,000 and could pay Rose off and put a dent in my debt to Jones.

It didn't occur to me that Murphy might want to interfere with our plans. You know Murphy, right? He's that fella they discovered at Edwards AFB who screws up your plans just for the hell of it. It was right there on the paper, by the time the kids graduated; we have a whole section free and clear. We'd also have 8 Clydesdales, 3 times as many saddle horses and more fuel than we could use. Irrigation is extensively used along the Arkansas and we should have ample water.

Jones wanted \$1,500 an acre and said he wouldn't consider less. We ended up settling on \$1,250, \$80 thousand more than I wanted to pay. It was a gamble, but that's how you grow. The \$320,000 balance was due in 10 equal payment plus interest. Then Don got a warning ticket and I'd have to haul the kids to school.

At 4,400 gallons a week, it would take us to 16 weeks to convert the 71,640 gallons of oil. Because I could handle it by myself, we were short one person to do the fall plowing. You can't plant soybeans in the same field repeatedly; eventually, you have to switch to corn, oats and grass. The three of us agreed to go all out for one more year and then make the switch.

"If by some stroke of luck you do make \$160,000 next year, why would you pay off Rose and make a payment to Jones?" June asked. "She'd be entitled to half of one quarter of

what you earn \$20,000. You could give her \$20 and Jones \$100, that's the interest bearing debt."

"June the deal with Jones is \$32,000 plus interest. I really need a new used tractor; it's pretty hard to farm a section of land with one tractor."

"What's Jones doing with his farm equipment?"

"Farm auction."

"Take Paul and Mike with you and bid on the equipment, I should think that it will sell dirt cheap; who has the fuel for tractors these days?"

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If you look at any small town in the Midwest, Fairfield, IA or Lakin, KS just to name a couple, they're all basically the same, agricultural communities selling goods and services to the farmers and the townsfolk. The Midwest is the Great Plains states, farming Country. Depending on where you look, Iowa isn't a Great Plains state, but I think that it is. "Iowa, in common with other Great Plains states (especially Kansas, Nebraska, Oklahoma, North and South Dakota), is feeling the brunt of falling populations. 89% of the total cities in those states have fewer than 3000 people; hundreds have fewer than 1000. Between 1996 and 2004, almost half a million people, nearly half with college degrees, left the six states. "Rural flight" as it is called has led to offers of free land and tax breaks as enticements to newcomers." It gets worse, Whirlpool bought Maytag. The next to go will probably be the Amana Refrigeration or the Woolen Mills.

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A farm tractor is far different from a car or pickup. Look around and you see the old Ford 8N, 9N and 2N tractors from the late '40s. You can rebuild a tractor a dozen times and with a Ford, that means resleeve the motor, rebuild the starter, put a kit in the carburetor, rebuilt the tranny, etc. When the heads warp you get them milled, simple. Don't know that the manufacturers of farm tractors intended them to last forever, but they do, with a little care and an occasional coat of paint.

The rule of thumb, in my book, is, the older the better because they have fewer parts and are less complicated. Let's stick with Ford, since I know a little about them. After the NAA and NCA series came the 800 and 900 series. The 800 was a short tractor and the 900 series was Ford's first tall tractor. The 900 series came in row crop and wide front end and were fueled by gas, LP or diesel and that was in the 1950s. Ford got together with Fordson in England and imported the Fordson Major Diesel for a while. Then they brought out the 6000 series and I lost interest. I absolutely loved the 960 they made starting in '58. They actually came out in '56, but had a one piece front end. I didn't care for the LP, but the diesel was ok. Gas was cheap in '58.

"What kind of equipment does he have?"

"Massey-Ferguson."

"Diesel?"

"You bet."

"Combine?"

"Self-propelled with grain and corn heads."

"Anything else?"

"Wagons, an elevator, sickle bar mower, 4 bottom plow and 24' tandem disk. Probably some other equipment I didn't notice."

"And to think we sunk that money into those Clydesdales," Mike grouched.

"You wait Mike; they'll be worth their weight in gold."

"Hardly."

"You know what I meant."

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Strangely, we were the only 3 purchasers at the farm sale. We got together with Jones and the auctioneer and negotiated a package price, just enough over the reserve that the auctioneer got his commission. Jones could have had all the money, if he had talked to us first. We got it cheap, but it needed work, it wasn't in the best of condition. I got the manure spreader, and a tractor. Paul and Mike divided up the remaining equipment.

"Jason, get Jim to help you and pull those fences out, I want to farm the section as a section, except for how the home 160 is divided up."

"What do you want us to do with the wire?"

"Roll it up and store it. Save all the metal posts and as many of the wood posts as you can."

Factoid: Barbed (standard and suspension) wire and cable fences are not effective for swine confinement. Woven wire fences with one or more strands of barbed wire (placed along the ground to discourage rooting) provide good hog control. Medium and heavy-weight woven wire fences with small openings are excellent for restraining swine. Maximum fence height should be 54 inches. Fences built close to the ground prevent hogs

from escaping by rooting underneath the fence. We always built our fences with the woven wire on the bottom and 2 or 3 strands of barbed wire on top. Every 3rd post was wooden and we used the steel T posts in between. The posts were spaced at about 10'.

The easiest livestock to have if you want to rapidly increase your herd are hogs. Never mind the begets, the average litter is 10 pigs (8 the first year and 12 thereafter with an average of 8-10 surviving to market) and it should be 50-50 male and female on the average. Sows sometimes lay on their piglets and you lose a few. Some weren't healthy pigs. Sow can have 2 litters a year.

We had an implement dealer pick up the equipment and haul it off to be repaired. We continued to produce biodiesel throughout the winter and Jason and Jim got the fences down and most of the land plowed before the snow intervened. There has to be a better way to make a living than farming, or so thought the kids who contributed to the rural flight phenomena. Making biodiesel wasn't particular hard work, it mostly took time. While Don and Ray continued to extract the oil, Mike, Paul and I and Karen Ralston converted the oil to biodiesel. After winter came, Jason took Karen's place.

We only processed biodiesel during the week and I'd start a batch, haul the kid's to school, come home for breakfast and start the second batch. Every batch was worth \$330. The kids were tending to the stock, before and after school, and June was milking the cows, cleaning, cooking and only God knows what else. The 12 hours days were the easiest 12 hours I ever worked when compared to farming. I'm not so sure I wasn't being better paid, too.

Although we got snow, it wasn't nearly as much the second winter. Would we have enough water for the coming summer? How much would the soybean yield fall planning soybeans 2 years in a row using only manure for fertilizer and maybe a little lime? How long was it going to take to build a large herd of cattle? Sitting on your behind, you have a lot of time to think. Remember that I said we didn't need 4 stills? I was wrong; we needed stills to recycle the alky-hall. They also helped in refining the biodiesel. We also needed lye and it was getting harder to find. Murphy? A number of local vendors have taken up the slack to make up for Red Devil Lye being pulled from the supermarkets. We got lucky and found several 50# pails of Boyer Lye in Garden City.

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"Looking forward to graduation, Don?"

"No."

"Why not?"

"Sandy still has one more year of school."

"Getting serious, is it?"

"What do you mean?"

"Thinking about getting married?"

"We talked about it but, haven't decided anything, for sure."

If Don could have seen the look Sandy gave him... It seemed clear to June and me that Sandy had her mind made up, and Don didn't stand a snowball's chance in hell. Paul had already had a contractor put in a new basement and he'd installed a triple wide mobile home. He'd told me that as soon as Don graduated, he was moving him over there. He managed to find a wood furnace but had to put in propane for the hot water heater and kitchen stove, which reminded me that I needed to top off my tank again.

Other news from our get together? Sue is expecting their second child and Karen their third. Both women said that they wanted boys. Jim and Mary finally discovered the opposite sex and seem to have a couple of 'very good friends' at school. Turkeys were easier to get this year; one of the other farmer's took up raising them. And, speaking of other farmer's, a couple more were starting to produce biodiesel.

Jim was now at the age where I began thinking about getting him a diesel pickup. I decided to hell with paying either Rose or James Jones off early and try to accumulate a little money so I could buy the things that we'd need in the foreseeable future. Like a couple of mobile homes in a couple of years; like a good used diesel pickup; and, like those H&K firearms I wanted but couldn't find.

What else? The two TV stations in Garden City were finally back on the air, as were the Kansas radio stations. I'd have to say that I almost wished they weren't. Lots of bad news, now that they were getting feeds from BBC and Reuters. After the US left Iraq and the civil war broke out, the Iran sided with the Shi'a majority and they decimated the Sunni population. I don't think the Kurds made out very well either. When Iran announced they had succeeded in developing a nuclear weapon, Israel elected to use their ultimate option on most of the Middle Eastern countries that called for their demise. That had been several months back.

India and Pakistan had both been hit by the Chinese and had retaliated; however not all of their weapons were aimed at China. BBC didn't have any estimates of the worldwide deaths from the H5N1 virus, but early indications were that they far exceeded the 1918 Spanish Flu Pandemic. The Spanish Flu Pandemic was an unusually severe and deadly strain of avian influenza, a viral infectious disease, which killed some 50 million to 100 million people worldwide over about a year in 1918 and 1919. It was caused by the H1N1 type of influenza virus, which is similar to bird flu of today, mainly H5N1 and H5N2. H1N1 can affect both fowl and swine.

The real problem in counting the deaths was that the war also caused a lot of deaths and they were having trouble sorting it out. They weren't able to count the deaths in the

US or China. China was too radioactive and the US CGS wouldn't let anyone past them. Our Navy was telling everyone to keep their nose out of our business or they'd get a missile up their butts or down their smokestacks or wherever. Now, if they could just get the Mexican border closed... Well, it seems like they did that too, lots of unused Abrams tanks and Bradley Fighting Vehicles sitting around with no war to fight. That head Mexican, Calderón, complained, until (somebody) told him that we still had about 450 undamaged Minuteman III missiles. You tell 'em we're going to fry their tortillas.

Oh, yeah, we were catching up on all of the news. Some bad, some good. Kinda dumb closing the border AFTER the terrorist attack. Good use for the military vehicles, however. After all those years fighting Iraq, I'd imagine some of those troops were quick on the trigger. Basically the war in Iraq ended the same way as the war in Vietnam, not that we intended that it did. The Shi'a and Sunni were very Democratic when they shot each other, they killed everybody. What do you mean that isn't very Democratic? We taught them Democracy!!!

We shoulda kept our noses out of their business, we coulda. However, late in the day, information came forth the George was right; Saddam had hidden his WMDs, some, it was suspected, in Syria. It raised his popularity about 0.1%. The limey's went home, probably to squeeze their limes. Oh, the British Royal Navy wasn't in Iraq, sorry. Limey is an Alternate word for British. It is a racist term, coming from the habit of British sailors to consume limes as a source of citrus to ward off scurvy. Racist? Really? Many Americans were English, originally. Well, see if we ask you to help us in the NEXT war. We still have our military, fighting Santa Anna. We're just a bit short on Country.

That's the News At the Top of The Hour. (I kept a copy, but, if y'all recall it wasn't fiction. One of my better efforts, in sarcasm.) One fella says: A real survivalist can tend to their own injured and ill. I agree. Or, give 'em Elderberry juice; I hear it cures most everything. Does it cure an overdose of radiation? If you had a shelter and a CD V-715 Package from Radimeters4U, you might not get an overdose. We did, and we didn't. Had vaccinations and Tamiflu, too. Get a bad overdose of radiation and you gonna die. Not a nice way to go, but neither is a *Rhapsody in Blue*, these days; I hate flying because, what goes up, must come down, and not always under control.

Ever watch Seconds from Disaster on the National Geographic Channel, back when we had a National Geographic Channel? One moment, everything appears to be normal. Seconds later, an unimaginable disaster. How could this happen? Blending advanced CGI, archival footage, re-enactments, forensic science, dramatic eyewitness accounts and expert testimony, join us as we deconstruct, moment-by-moment, the chain of events leading to some of the world's most infamous disasters. They do tend to repeat themselves, too. They made several shows, which they showed, over and over. Including the Concorde Crash, TWA 800, Collision On The Runway (in the Canary Islands), Plane Crash In The Suburbs. All were unlikely outcomes. Sorry Doc, those were just some of their airplane Disasters. Thinking about taking a drink is about as HIGH as I want to get. How long does it take a plane to crash?

One disaster after another happens on this trans-Pacific flight. You have the pilot who loses his nerve! The washed-up co-pilot. The milquetoast flight engineer. The young hot shot second officer. And a cabin full of passengers with every range of problems and personalities there could possibly be. Here you have the Duke in a role he didn't want, and a movie with the title song that became Duke's theme. What else could any John Wayne fan want? It's all here, and then some. Many of you have probably never seen *The High and the Mighty* (1954). It won an Oscar for Best Music, Scoring of a Dramatic or Comedy Picture and was nominate for 5 more. The film is owned by Batjac Productions. I've heard that name before.

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Television evangelist Pat Robertson said Monday on his live news-and-talk program "The 700 Club" that Islam is not a religion of peace, and that radical Muslims are "satanic." Robertson has come under intense criticism in recent months for comments suggesting that American agents should assassinate Venezuelan President Hugo Chávez and that Israeli Prime Minister Ariel Sharon's stroke was divine retribution for Israel's pullout from the Gaza Strip. The man is entitled to his opinions, but they ought to put a muzzle on him when he appears on TV. His comments were edited out and didn't appear on the website.

◦

Asteroid – Naturally formed solid bodies that orbit the sun, have no atmosphere and no signs of gas or dust coming from them. Most are found in orbit between the orbits of Mars and Jupiter.

Comet – Small bodies of rock, iron and frozen water and gases that orbit the sun in elliptical orbits. As they get close to the sun the gas vaporizes leaving a tail of dust and debris.

Meteor – Rock, iron and/or icy body entering the Earth's atmosphere.

Meteorite – Any meteor striking the ground.

Meteoroid – A piece of comet debris. When the Earth enters a meteoroid stream left by a comet it produces a meteor shower.

Every day Earth's atmosphere is struck by hundreds of thousands or even millions of meteoroids, but most never reach the surface because they are vaporized by the intense heat generated when they rub against the atmosphere.

To date, none of the meteorites found on earth have come from comets and we have no meteoroids. Another reason might be that if a meteoroid hits the earth, it's called a meteorite. I would like to thank Clarence for this information.

o

"How long until it's ready, I could use a sample about now?"

"I'd say a minimum of 4 years, 12 would be better. Have any trouble charring the casks?"

"Nope. I took a sip of that White Lighting, it was pretty raw."

"We all did and you're right, almost worse than getting bit by a snake."

"You can't make good hooch with pure ally-hall."

"I checked it with the hygrometer, it's about 100 proof."

We'd watched the news on TV and ate every bit of the turkey and fixings. That stuff in turkey makes you pretty mellow, or maybe it's just an over filled stomach. We'd managed to work out the bugs in our biodiesel production and by now were operating at capacity. There hadn't been any sign of the government, although we knew they were out there, somewhere. We didn't need them and would prefer if they messed up helping someone who needed the help.

We were making out just fine down here at the end of the world. Why didn't we do this BEFORE the war? We could have let China take Vietnam for their oil and saved ourselves lots of misery. The wind turbines weren't a perfect solution because sometimes the wind didn't blow and the generators would kick in. Mike had to climb on the roof of his machine shed every time it snowed and brush the snow off.

The County and City were paying for the fuel in gold and silver. We had no idea where they got it, probably the government, but you didn't see a whole lot of those 1 ounce coins, not for what they were worth. By going back to the gold standard, the price of gold eventually stabilized at the official price of \$1,250 an ounce and silver at \$25 an ounce. Because other farmers started to produce biodiesel too, the price was stabilized now at \$6 a gallon. A few folks tried to get their cars to run on ethanol, that's what cars ran on when they were first invented.

There were more than a few of the E85 vehicles around. E85 is 85% ethanol and 15% gasoline. They were the best place to start. The advantage to the E85 vehicles from my viewpoint was that with 15% gasoline, you solved the problem with the fuel absorbing water. Just because the world had ended didn't mean they quit pumping from the oil wells and refining the crude. The biggest problem was distribution. In terms of yield, corn produced more ally-hall than soybeans did biodiesel, by a very large factor. It was hard to burn ethanol in a diesel because of its low cetane number. A place over in Garden city started producing the E85 fuel and there was a run on those E85 vehicles. There just weren't quite enough to go around. We'd always run June's car on E10, gas-ohol, but it was built in 2007 and was certified to run on E85.

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"Do you think we should build a bigger still and produce more ethanol?"

"Hadn't thought about it, Mike, how much ethanol do they want?"

"About 666 thousand gallons, they managed to get 100,000 gallons of unleaded gas from Oklahoma. Oklahoma has 5 refineries, 1 in Ponca City, 2 in Tulsa, 1 in Ardmore and 1 in Wynnewood."

"An 80 acre field of corn should produce over 200,000 gallons of ethanol; we wouldn't want to plant too much. Besides, do you think it's worth the investment?"

"Probably not, it was just a thought. We could sell the corn to Reeve Agri Energy in Garden City and let them produce the ethanol. I thought maybe we could cut back on the biodiesel just a shade for one year and build up our feed stocks. Maybe plant 1,660 acres in beans and the rest in corn and hay."

"Fine, I'll plant our timothy, I have the seed. I'll do 20 acres of that, 40 of alfalfa, 360 in beans and 200 in corn. That will leave the home places plus 10 acres for gardening."

One of these days I might get rich, but it probably wouldn't be this year. As long as I could make the land payments, have food for my family and increase the herds, albeit slowly, I didn't have anything to complain about. Jim suggested that I hire some of his classmates this coming year to help in the garden and all the many tasks we were spread too thinly to accomplish easily.

Winter on a farm is a very lonely time. You can't work in the fields and once the live-stock is tended to, you have lots of free time. In our case, the free time was being consumed producing biodiesel. We'd use our one free stud service to breed the Clydesdale mares just short of being 4. Depending on what we got, we might each keep one stallion and geld the rest. The word is that geldings grow faster than stallions.

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"Randy, Paul can you hear me?"

"What's up Mike?"

"Got some people coming in I don't recognize. I called the Sheriff, but he said it would take them a minimum of 20 minutes to respond and I don't think we have 20 minutes."

"June, grab your guns, Mike has trouble."

"What kind of trouble?"

"Maybe gun kind of trouble. I'll radio Jason and tell him to get up there to back us up."

It didn't make any sense, it was winter and we were long past when we thought we'd have trouble out of anyone, roughly 18 months since the war and even longer since the terrorist attack and the avian flu. If people were going to be moving around, you'd have thought they'd have done it during the summer, not when there was snow on the ground. We bundled up, got the weapons and headed to Mike's.

"Whatcha got?"

"Group of about 20 people up on the next place north. Looks like families to me, but they're all carrying guns. They're walking and headed this way."

"I wouldn't get too excited about the guns; we've all been carrying since the war. Did you approach them and ask what they wanted?"

"I was waiting for everyone to show up, there's too many for Ray and me to handle by ourselves."

"Si vis pacem, para bellum"

"Huh?"

"If you want peace, prepare for war."

"Maybe they're friendly," June suggested.

"Very well could be, but I didn't want to find out the hard way."

"You men all think that everyone's out to get you," Rachel opined.

"A man has an obligation to protect his family honey," Mike retorted. While he was obviously speaking to Rachel, the comment wasn't lost on June or Marilyn. Safe was better than sorry, I just as soon not have to use our medical supplies patching up combat wounds. We needed to keep an open mind here and react as the situation called for, force if necessary or Christian charity if that's what the situation called for. I tried to think what it must be like for those 20 people headed our way. If they were peaceful, something must have forced them to move and they could be very afraid.